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Search Topic:

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevant citations, authors, keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevant claim(s).

STAFF USE ONLY

Date completed: 05-23-02
 Searcher: Beverly E 4994
 Terminal time: 20
 Elapsed time: _____
 CPU time: _____
 Total time: 25
 Number of Searches: _____
 Number of Databases: 1

Search Site

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 _____ CM-1
 _____ Pre-S

Type of Search

_____ N.A. Sequence
 _____ A.A. Sequence
 _____ Structure
 _____ Bibliographic

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 _____ Dialog
 _____ APS
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 _____ SDC
 _____ DARC/Questel
 _____ Other CGN

GenCore version 4.5
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OM protein - protein search, using sw model

Run on: May 22, 2002, 16:16:24 ; Search time 29.93 Seconds
(without alignments)
578.935 Million cell updates/sec

Title: US-09-770-528-2
Perfect score: 156
Sequence: 1 MVLVSGALCFMRKDSALKVL.....IPEDPAWDAPITDFYFQCD 156

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 747574 seqs, 11107396 residues

Word size : 12
Total number of hits satisfying chosen parameters: 39

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 1000 summaries

Database : A_Geneseq_032802.*
1: /SIDSL/gcgdata/hold-geneseq/geneseq-emb1/AA1980.DAT.*
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20: /SIDSL/gcgdata/hold-geneseq/geneseq-emb1/AA1999.DAT.*
21: /SIDSL/gcgdata/hold-geneseq/geneseq-emb1/AA2000.DAT.*
22: /SIDSL/gcgdata/hold-geneseq/geneseq-emb1/AA2001.DAT.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	156	100.0	156	19	AAW86284
2	156	100.0	156	20	AAV28407
3	156	100.0	156	21	AAV2260
4	156	100.0	156	21	AAV45061
5	155	99.4	155	21	AAV96937
6	155	99.4	155	22	AAV35261
7	155	99.4	155	22	AAV66672
8	155	99.4	155	22	AAV48828
9	154	98.7	154	22	AAV66663
10	94	60.3	94	21	AAV97068
11	44	28.2	80	20	AAV43525

12	44	28.2	80	22	AAV66663	Protein encoded by Interleukin-IL1 re
13	44	28.2	154	22	AAV35263	Human Interleukin
14	44	28.2	155	20	AAV28408	Human IL-1 recepto
15	44	28.2	155	21	AAV96936	Human IL-1 homolog
16	44	28.2	155	21	AAV92256	Human IL-1 homolog
17	44	28.2	155	21	AAV92257	Human IL-1 homolog
18	44	28.2	155	21	AAV45062	Human TANGO-93 pro
19	44	28.2	155	22	AAV66655	Human Interleukin-
20	44	28.2	155	22	AAV87601	Human PRO342. Ho
21	44	28.2	155	22	AAV35260	Human IL-IL1. Hom
22	44	28.2	155	22	AAV35262	Protein encoded by Interleukin-IL1 re
23	44	28.2	155	22	AAV66664	Interleukin-IL1 re
24	44	28.2	157	22	AAV35364	Novel human diago
25	39	25.0	258	22	ABG22711	A human interleuki
26	34	21.8	155	20	AAV43526	Human IL-1 recepto
27	33	21.2	98	21	AAV97067	Interleukin-IL1 pe
28	33	21.2	104	22	AAV35266	Hhuman IL-1 homolo
29	33	21.2	155	21	AAV92253	Generic human IL-1
30	33	21.2	155	21	AAV92254	Generic human IL-1
31	33	21.2	155	21	AAV92255	Epitope fragment o
32	21	13.5	21	19	AAV85942	Epitope fragment o
33	18	11.5	18	19	AAV85941	Epitope fragment o
34	13	8.3	13	19	AAV85947	Epitope fragment o
35	13	8.3	13	19	AAV85948	Epitope fragment o
36	13	8.3	13	19	AAV85943	Epitope fragment o
37	13	8.3	13	19	AAV85944	Epitope fragment o
38	13	8.3	13	19	AAV85945	Epitope fragment o
39	12	7.7	12	19	AAV85946	Epitope fragment o

ALIGNMENTS

RESULT 1
AAW86284
ID AAW86284 standard; Protein; 156 AA.

AC AAW86284;
XX 19-FEB-1999 (first entry)
DT Rodent interleukin (IL)-1 delta polypeptide.
XX Interleukin; IL-1 delta; polyclonal antibody; IL-1 epsilon; cytokine;
DE inflammatory response; immune system; diagnosis; agonist; antagonist;
KW chemokine.
XX Mus sp.
XX WO9847921-A1.
PD 29-OCT-1998.
XX 17-APR-1998; 98WO-US06879.
XX 06-AUG-1997; 97US-0055111.
PR 21-APR-1997; 97US-0837627.
XX (SCHE) SCHERING CORP.
XX Bazan JF, Hedrick JA, Kastelein RA, Sana TR;
PI WPI; 1998-609976/51.
DR N-PSDB; AAV71958.
XX Mammalian interleukin 1-delta and 1-epsilon - useful for, e.g.
PT regulating the immune system and inflammatory responses
XX Claim 1; Pages 89-90; 113pp; English.
XX This represents a rodent interleukin (IL)-1 delta polypeptide. The
CC invention relates to a recombinant polypeptide that specifically binds
CC polyclonal antibodies (Abs) generated against a 12 consecutive amino acid

CC segment of IL-1 delta or IL-1 epsilon. Agonists or antagonists of these
CC IL polypeptides are used to regulate a cell involved in an inflammatory
CC response. The IL-1 delta or IL-1 epsilon polypeptides and peptides are
CC used to produce Abs and antigen-Ab complexes. The polypeptides, Abs and
CC the corresponding nucleic acids regulate development and/or the immune
CC system, and can be used to diagnose and treat conditions associated with
CC abnormal expression of IL. Agonists or antagonists of IL-1 delta or IL-1
CC epsilon polypeptides are used with agonists or antagonists of IL-1 alpha,
CC IL-1RA, IL-1 beta, IL-1 gamma, IL-2 and/or IL-12. The IL-1 delta or IL-1
CC epsilon polypeptides may be used as a soluble polypeptide or as a fusion
CC protein with another cytokine or chemokine.

XX Sequence 156 AA;

Query Match 100.0%; Score 156; DB 19; Length 156;
Best Local Similarity 100.0%; Pred. No. 5.6e-160;
Matches 156; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MMVLSGALCFRMDKSAKLVLYLHNQLLAGGLHAQKVIKGEISVVPNRALDASISPVIL 60
DB 1 MMVLSGALCFRMDKSAKLVLYLHNQLLAGGLHAQKVIKGEISVVPNRALDASISPVIL 60
QY 61 GVQGSQCLSCGTEKGPILKLEPVNIMELYLGAKESKFTFYRRDMGLTSSFESAAYPGW 120
DB 61 GVQGSQCLSCGTEKGPILKLEPVNIMELYLGAKESKFTFYRRDMGLTSSFESAAYPGW 120
QY 121 FLCTSPADQPVRLTQIPEDPAWDAPITDIFYFOQCD 156
DB 121 FLCTSPADQPVRLTQIPEDPAWDAPITDIFYFOQCD 156

RESULT 2

AAY28407
ID AAY28407 standard; Protein; 156 AA.

XX AAY28407;

XX 28-SEP-1999 (first entry)

XX Mouse Interleukin 1 delta.

XX Interleukin 1 delta; IL-1 delta; glaucoma; ectodermal dysplasia;
KW insulin-dependent diabetes mellitus; wrinkly skin syndrome;
KW T-cell leukemia; lymphoma; tibial muscular dystrophy.

XX Mus musculus.

XX WO9935268-A1.

XX 15-JUL-1999.

XX 08-JAN-1999; 99WO-US00514.

XX 01-JUN-1998; 98US-0087393.

XX 09-JAN-1998; 98US-0071074.

XX (IMMUNEX) IMMUNEX CORP.

XX Silms JE;

XX WPI; 1999-458310/38.

XX N-PSDB; AAX89431.

XX Murine and Human Interleukin 1 delta DNA, polypeptides and its
XX fragments, useful as molecular weight markers

XX Claim 1; Page 67; 72pp; English.

XX The present sequence represents mouse interleukin 1 delta (IL-1 delta).
CC IL-1 delta proteins are useful for the determination of the molecular
CC weight of a sample protein. The protein and its fragments are useful as
CC controls for peptide fragmentation. This is useful for determining the

CC isoelectric point of a sample protein. Antibodies generated against
CC IL-1 delta and its fragmented peptides can be used to enhance the
CC accuracy of these molecular weight markers to determine the apparent
CC molecular eight and isoelectric point of a sample protein. IL-1 delta
CC can be used to screen for potential inhibitors of activity associated
CC with IL-1 delta counter-structure molecules. IL-1 delta can also be used
CC as therapeutic agents for the treatment of diseases mediated by IL-1
CC delta. IL-1 delta may be used as a reagent in studying the interleukin 1
CC (IL-1) signalling pathway, or as a reagent to block IL-1 signalling. The
CC IL-1 delta coding sequences can be used to identify human chromosome 2,
CC and to identify genes associated with certain diseases, especially with
CC region 2q11-12, including glaucoma, ectodermal dysplasia, insulin-
CC dependent diabetes mellitus, wrinkly skin syndrome, T-cell leukemia/
CC lymphoma and tibial muscular dystrophy.

XX Sequence 156 AA;

Query Match 100.0%; Score 156; DB 20; Length 156;
Best Local Similarity 100.0%; Pred. No. 5.6e-160;
Matches 156; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MMVLSGALCFRMDKSAKLVLYLHNQLLAGGLHAQKVIKGEISVVPNRALDASISPVIL 60
DB 1 MMVLSGALCFRMDKSAKLVLYLHNQLLAGGLHAQKVIKGEISVVPNRALDASISPVIL 60
QY 61 GVQGSQCLSCGTEKGPILKLEPVNIMELYLGAKESKFTFYRRDMGLTSSFESAAYPGW 120
DB 61 GVQGSQCLSCGTEKGPILKLEPVNIMELYLGAKESKFTFYRRDMGLTSSFESAAYPGW 120
QY 121 FLCTSPADQPVRLTQIPEDPAWDAPITDIFYFOQCD 156
DB 121 FLCTSPADQPVRLTQIPEDPAWDAPITDIFYFOQCD 156

RESULT 3

AAY92260
ID AAY92260 standard; Protein; 156 AA.

XX AAY92260;

XX 10-AUG-2000 (first entry)

XX Murine IL-1 homologue, zilla3.

XX Generic; interleukin-1; IL-1; homologue; zilla3; anti-inflammatory;
KW antagonist; pro-inflammatory; agonist; immunomodulator; antiarthritic;
KW antirheumatic; osteopathic; antipsoriatic; antibacterial; cytostatic;
KW immunosuppressive; antiulcer; antidiabetic; nephrotropic; vasotropic;
KW vulnerary; zql4.

XX Mus musculus.

XX WO200020595-A1.

XX 13-APR-2000.

XX 08-OCT-1999; 99WO-US23533.

XX 08-OCT-1998; 98US-0169745.

XX (ZYMO) ZYMOGENETICS INC.

XX Sheppard PO, West RR, Clegg CH;

XX WPI; 2000-303780/26.

XX N-PSDB; AAA09198.

XX Proteins useful for treatment of inflammatory conditions such as
PT rheumatoid arthritis and psoriasis are agonists or antagonists forms of
XX new interleukin-1 homologue

XX Example 7; Page, 59-60; 64pp; English.


```

PR 13-APR-1999; 99US-0129122.
XX (GETH ) GENENTECH INC.
XX
XX Goddard A, Pan J;
XX
XX WPI; 2000-452395/39.
XX N-PSDB; AAA51599.
XX
XX Nucleic acids encoding interleukin-1-like polypeptides, useful for
XX preventing and treating e.g. inflammation, asthma and psoriasis
XX
XX Claim 22; Fig 9A-B; 143pp; English.
XX
XX An isolated nucleic acid molecule encoding an interleukin-1-like
XX polypeptide (IL-1p) that retains one or more activities of the peptide
XX from which it is derived, such as the IL-18R binding activity of a human
XX interleukin-1 receptor antagonist-1 (hIL-1ra1) polypeptide, is new. The
XX nucleic acids may be used in molecular engineering applications, e.g.
XX hybridization assays and chromosome and gene mapping studies, for
XX recombinantly producing the IL-1p polypeptide or for producing gene
XX knock out animals to study the role of the protein in metabolism and
XX disease processes (conversely, gene therapy protocols may be used to
XX supplement a patient's production of the polypeptide or to rectify
XX mutations that lead to the production of in active peptides). The
XX peptides produced may be used to screen for and produce modulators (e.g.
XX antibodies) of IL-1p protein expression and activity which may be use
XX to treat disorders associated with inappropriate IL-1p expression and
XX activity, such as inflammatory disorders, asthma, arthritis,
XX osteoarthritis, sepsis, acute lung injury, adult respiratory distress
XX syndrome, idiopathic pulmonary fibrosis, ischemic reperfusion disease,
XX psoriasis, graft versus host disease and/or inflammatory bowel disease.
XX
XX Sequence 155 AA;
XX
XX Query Match 99.4%; Score 155; DB 21; Length 155;
XX Best Local Similarity 100.0%; Pred. No. 6.7e-159;
XX Matches 155; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2 MVLGALCFRMDKALKVLYLHNNQLLAGGLHAQKVIKGEISVVPNRALDASLPVILG 61
XX Db 1 mvlsgalcfmrkmdalkvlylhnqqllaggghaekvikgeisvvpnraldaslpvllg 60
XX
XX QY 62 VQGSQCLSCGTEKGPILKLEPVNIMELYLGAKESKSFTEFYRDMGLTSSFESAAYPGWF 121
XX Db 61 vqgsqclscgtekqilkepvnimelylgakeskfstfyrdmgltsfesaaypgwf 120
XX
XX QY 122 LCTSPREADQPVRLTQIPEDPAWDAPITDFPQQCD 156
XX Db 121 lctspreadqpvrltqipedpawdapitdfpqcd 155
XX
XX RESULT 6
XX AAB35261
XX ID AAB35261 standard; Protein; 155 AA.
XX
XX AC AAB35261;
XX
XX DT 08-MAY-2001 (first entry)
XX
XX DE Murine IL-1L1.
XX
XX KW Mouse; IL-1L1; interleukin-1 locus; IL-1beta; IL-1receptor; psoriasis;
XX chromosome 2q13; inflammatory disease; heart disease; Graves' disease;
XX rheumatoid arthritis; inflammatory bowel disorder; diabetes; cancer;
XX osteoporosis; systemic lupus erythematosus.
XX
XX OS Mus sp.
XX
XX PN WO200105974-A2.
XX
XX PD 25-JAN-2001.

```

XX Ford J, Pace A;
XX WPI; 2001-071582/08.
XX
XX Isolated nucleic acids encoding interleukin-1 (IL-1) receptor
XX antagonist proteins (referred as IL-1hY1), useful in the treatment of
XX cancer, e.g. breast adenocarcinoma and brain tumors, and an
XX inflammatory disease mediated by IL-18 -
XX
XX Disclosure; Page 177; 179pp; English.
XX
XX The present invention relates to interleukin (IL)-1 receptor
XX antagonist proteins. IL-1hY1 is useful for treating cancer,
XX an inflammatory disease mediated by IL-18, inflammation
XX resulting from infection or allergic reactions, and inflammation
XX associated with chronic bronchitis, arthritis, diabetes or
XX endothermia.
XX
XX Sequence 155 AA;
XX
XX
XX Query Match 99.4%; Score 155; DB 22; Length 155;
XX Best Local Similarity 100.0%; Pred. No. 6.7e-159; Indels 0; Gaps 0;
XX Matches 155; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2 MVLSGALCFRMKDSALKVLYLHNQLLAGGLHAKEVKGEEISVVPNRALDASLSPVILG 61
XX Db 1 mvlsгалсfrmkdsalkvlylhnqllagglhaekvikgeeisvvpnraldaslsplvg 60
XX
XX QY 62 VOGSQCLSCGTEKGPILKLEPVNIMELYLGAKESKSTFYRRDMGLTSSFSAAYPGW 121
XX Db 61 vqgsgciscgtekpgilklepvnimelylgakeskstfyrddmgltsfsesaaypgwf 120
XX
XX QY 122 LCTSPADQPVRLTQIPEDPAWDAPITDFYFQQCD 156
XX Db 121 lctspadqpvrltqipdpawdapitdfyfqqcd 155
XX
XX
XX RESULT 8
XX AAB48828
XX ID AAB48828 standard; Protein: 155 AA.
XX AC AAB48828;
XX
XX DT 09-MAR-2001 (first entry)
XX
XX Murine interleukin-1 homologue 3 (IL-1H3).
XX
XX Interleukin-1 homologue 3; IL-1H3; mouse; murine; drug screening;
XX agonist; antagonist; human disease; chronic inflammation;
XX acute inflammation; septicemia; autoimmune disease; psoriasis;
XX inflammatory bowel disease; arthritis; transplant rejection; infection;
XX graft versus host disease; acute respiratory distress syndrome; allergy;
XX asthma; restenosis; stroke; ischaemia; brain injury; AIDS; bone disease;
XX osteoporosis; cancer; lymphoproliferative disorder; atherosclerosis;
XX congestive heart failure; Alzheimer's disease; immunosuppressive;
XX antimicrobial; neuroprotective.
XX
XX Mus musculus.
XX
XX WO200071583-A1.
XX
XX 30-NOV-2000.
XX
XX 24-MAY-2000; 2000WO-US14200.
XX
XX 24-MAY-1999; 99US-0135599.
XX
XX 23-MAY-2000; 2000US-0577715.
XX
XX (SMK) SMITHKLINE BEECHAM CORP.
XX (SMK) SMITHKLINE BEECHAM PLC.

PI Smith RF, Young PR, McDonnell PC, Halsey W;
XX
XX WPI: 2001-025138/03.
XX N-PSDB; AAC81700.
XX
XX Murine interleukin-1 homolog polypeptide used for screening modulators
XX of the polypeptide which can be used for treating autoimmune diseases,
XX cancer, brain injury and bone disorders -
XX
XX Claim 2; Page 28-29; 31pp; English.
XX
XX The invention relates to murine interleukin-1 homologue 3 (IL-1H3;
XX AAB48828) and nucleic acids which encode it (cDNA given in AAC81700),
XX including nucleic acid sequences with at least 95% identity to AAC81700.
XX The invention also relates to expression vectors and host cells
XX comprising murine IL-1H3 nucleic acids, the recombinant production of
XX murine IL-1H3, methods of screening for modulators of IL-1H3 activity,
XX and IL-1H3 agonists and antagonists thus identified. IL-1H3 agonists and
XX antagonists are of use for treating human diseases such as chronic or
XX acute inflammation, septicemia, autoimmune diseases (e.g.,
XX inflammatory bowel disease, psoriasis and arthritis), transplant
XX rejection, graft versus host disease, infection, stroke, ischaemia,
XX acute respiratory distress syndrome, allergies, asthma, restenosis,
XX brain injury, AIDS, bone diseases (e.g., osteoporosis), cancers
XX (e.g., lymphoproliferative disorders), congestive heart failure,
XX atherosclerosis and Alzheimer's disease. The present sequence
XX represents murine IL-1H3.
XX
XX Sequence 155 AA;
XX
XX
XX Query Match 99.4%; Score 155; DB 22; Length 155;
XX Best Local Similarity 100.0%; Pred. No. 6.7e-159; Indels 0; Gaps 0;
XX Matches 155; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2 MVLSGALCFRMKDSALKVLYLHNQLLAGGLHAKEVKGEEISVVPNRALDASLSPVILG 61
XX Db 1 mvlsгалсfrmkdsalkvlylhnqllagglhaekvikgeeisvvpnraldaslsplvg 60
XX
XX QY 62 VOGSQCLSCGTEKGPILKLEPVNIMELYLGAKESKSTFYRRDMGLTSSFSAAYPGW 121
XX Db 61 vqgsgciscgtekpgilklepvnimelylgakeskstfyrddmgltsfsesaaypgwf 120
XX
XX QY 122 LCTSPADQPVRLTQIPEDPAWDAPITDFYFQQCD 156
XX Db 121 lctspadqpvrltqipdpawdapitdfyfqqcd 155
XX
XX
XX RESULT 9
XX AAE06663
XX ID AAE06663 standard; Protein: 154 AA.
XX AC AAE06663;
XX
XX DT 16-OCT-2001 (first entry)
XX
XX Mouse interleukin-1delta (IL-1delta) protein.
XX
XX Mouse; interleukin-1delta; IL-1delta; virucide; hepatotropic; fever;
XX immunological disorder; tumour; inflammatory disorder; hypoglycaemia;
XX autoimmune disease; pulmonary tuberculosis; fulminant hepatitis; leprosy;
XX psoriasis; viral infection; allergy; cytokine; HIV; drug screening.
XX
XX Mus sp.
XX
XX WO200157219-A2.
XX
XX 09-AUG-2001.
XX
XX 01-FEB-2001; 2001WO-US03285.
XX
XX 02-FEB-2000; 2000US-0179638.

PA (SCHE) SCHERING CORP.
XX Debets JEMA, Timans JC, Bazan JF, Kastelein RA;
PI WPI; 2001-488886/53.
XX Novel isolated or recombinant antigenic interleukin-1 delta or epsilon
PT polypeptide useful for treating conditions exhibiting abnormal
PT expression of interleukin such as immunological disorders, tumor and
PT allergy -
XX Disclosure; Fig 1; 103pp; English.
PS
XX The invention relates to recombinant antigenic interleukin-1 like
CC molecules and their corresponding nucleic acid sequences, designated
CC as interleukin-1delta (IL-1delta) and interleukin-1epsilon (IL-1epsilon).
CC IL-1delta and IL-1epsilon are useful for treating conditions exhibiting
CC abnormal expression of the interleukin such as immunological disorders,
CC tumours, inflammatory disorders, fever, hypoglycaemia, psoriasis,
CC allergy, autoimmune diseases and infectious diseases (e.g., pulmonary
CC tuberculosis, leprosy, fulminant hepatitis, and viral infections such as
CC HIV). The invention also relates to methods of using the composition
CC containing IL-1delta or IL-1epsilon for both diagnostic and therapeutic
CC utilities. IL-1delta is used as an immunogen for the production of
CC antisera or antibodies specific, e.g., capable of distinguishing between
CC IL-1 family members and an IL-1delta, for the interleukin or its
CC fragment. The purified interleukin is used as a reagent to detect any
CC antibodies generated in response to the presence of elevated levels of
CC expression, or immunological disorders which lead to antibody production
CC to the endogenous cytokine. The invention also contemplates the use of
CC competitive drug screening assays. The present sequence is mouse
CC interleukin-1delta (IL-1delta) protein related to the invention.
XX
SQ Sequence 154 AA;

Query Match 98.7%; Score 154; DB 22; Length 154;
Best Local Similarity 100.0%; Pred. NO. 8e-156;
Matches 154; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 VLSGALCFRMDKSAKLVLYLHNNQLAGLHAERKVEISVVPNRALDASLSPVLGV 62
DB 1 VLSGALCFRMDKSAKLVLYLHNNQLAGLHAERKVEISVVPNRALDASLSPVLGV 60

QY 63 QGSGCLSCGTEKGPILKLEPVNIMELYLGAKESKSTFYRRDMLGTLSSFSAAYPQWFL 122
DB 61 QGSGCLSCGTEKGPILKLEPVNIMELYLGAKESKSTFYRRDMLGTLSSFSAAYPQWFL 120

QY 123 CTSPEADQPVRLTQIPEDPANDAPITDFYFOQCD 156
DB 121 CTSPEADQPVRLTQIPEDPANDAPITDFYFOQCD 154

RESULT 10
RAY97068
ID AAY97068 standard; Protein; 94 AA.
XX
AC AAY97068;
XX
DT 31-OCT-2000 (first entry)
XX
DE Murine IL-1 receptor antagonist 3 EST W08205 product.
XX
KW mIL-1RA3; interleukin-1 receptor antagonist-3; IL-1lp; osteopathic;
KW interleukin-1-like polypeptide; anti-inflammatory; anti-asthmatic;
KW anti-arthritis; antimicrobial; respiratory; anti-ischemic; vaccine;
KW dermatological; immunomodulatory; gastrointestinal; gene therapy..
XX
OS Mus sp.
XX
PN W0200039297-A2.
XX
PN 06-JUL-2000.

XX 22-DEC-1999; 99WO-US30720.
XX 23-DEC-1998; 98US-0113430.
PR 22-JAN-1999; 99US-0116843.
PR 13-APR-1999; 99US-0129122.
XX (GETH) GENENTECH INC.
XX
XX Goddard A, Pan J;
XX
XX WPI; 2000-452395/39.
DR N-PSDB; AAA51600.
XX
XX Nucleic acids encoding interleukin-1-like polypeptides, useful for
PT preventing and treating e.g. inflammation, asthma and psoriasis
XX
XX Example 1; Fig 10; 143pp; English.
XX
CC An isolated nucleic acid molecule encoding an interleukin-1-like
CC polypeptide (IL-1lp) that retains one or more activities of the peptide
CC from which it is derived, such as the IL-18R binding activity of a human
CC interleukin-1 receptor antagonist-1 (hIL-1RA1) polypeptide, is new. The
CC nucleic acids may be used in molecular engineering applications, e.g.
CC hybridization assays and chromosome and gene mapping studies, for
CC recombinantly producing the IL-1lp polypeptide or for producing gene
CC knock out animals to study the role of the protein in metabolism and
CC disease processes (conversely, gene therapy protocols may be used to
CC supplement a patient's production of the polypeptide or to rectify
CC mutations that lead to the production of in active peptides). The
CC peptides produced may be used to screen for and produce modulators (e.g.
CC antibodies) of IL-1lp protein expression and activity which may be used
CC to treat disorders associated with inappropriate IL-1lp expression and
CC activity, such as inflammatory disorders, asthma, arthritis,
CC osteoarthritis, sepsis, acute lung injury, adult respiratory distress
CC syndrome, idiopathic pulmonary fibrosis, ischemic reperfusion disease,
CC psoriasis, graft versus host disease and/or inflammatory bowel disease.
XX
SQ Sequence 94 AA;

Query Match 60.3%; Score 94; DB 21; Length 94;
Best Local Similarity 100.0%; Pred. NO. 2.5e-93;
Matches 94; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MMVLSGALCFRMDKSAKLVLYLHNNQLAGLHAERKVEISVVPNRALDASLSPVL 60
DB 1 MMVLSGALCFRMDKSAKLVLYLHNNQLAGLHAERKVEISVVPNRALDASLSPVL 60

QY 61 GVQGSQCLSCGTEKGPILKLEPVNIMELYLGAK 94
DB 61 GVQGSQCLSCGTEKGPILKLEPVNIMELYLGAK 94

RESULT 11
AAY43525
ID AAY43525 standard; Protein; 80 AA.
XX
AC AAY43525;
XX
DT 26-JAN-2000 (first entry)
XX
DE A human interleukin-1 receptor antagonist.
XX
KW Human; interleukin-1 receptor; IL-1; antagonist; sepsis;
KW acute pancreatitis; endotoxin shock; cytokine induced shock;
KW rheumatoid arthritis; chronic inflammatory arthritis;
KW pancreatic cell damage; diabetes mellitus type 1;
KW graft versus host disease; inflammatory bowel disease;
KW inflammation; pulmonary disease; autoimmune disease;
KW inflammatory disease; antiproliferative; myelogenous leukemia;
KW premature labor; intrauterine infection; nutritional activity;
KW hematopoiesis regulating activity; tissue growth activity;

KW activin activity; inhibin activity; chemotactic activity;
 KW chemokinetic activity; hemostatic activity; thrombolytic activity;
 KW anti-inflammatory activity.

OS Homo sapiens.

PN WO9951744-A2.

PD 14-OCT-1999.

XX 05-APR-1999; 99WO-US04291.

XX 03-APR-1998; 98US-0055010.

PR 15-MAY-1998; 98US-0079909.

PR 20-MAY-1998; 98US-0082364.

PR 19-JUN-1998; 98US-0099818.

PR 31-JUL-1998; 98US-0127698.

PR 13-JAN-1999; 99US-0229591.

PR 17-FEB-1999; 99US-0251370.

(HYSE-) HYSEQ INC.

PI Drmanac R, Crkvenjakov R, Dickson M, Drmanac S, Labat I;

PI Leshkowitz D, Kita D, Ford J, Pace A, Alfenito M,

XX WPI; 1999-611042/52.

DR N-FSDB; AAZ30048, AAZ30049.

XX New isolated interleukin-1 receptor binding polypeptides, used to treat

PT e.g. sepsis, shock, arthritis, pancreatitis, graft-versus-host disease,

PT inflammatory disease, autoimmune disease or proliferative disease -

XX Claim 8; Fig 3; 123pp; English.

XX The present sequence represents a human interleukin-1 (IL-1) receptor

CC antagonist. It is encoded by cDNA sequences obtained from the b2HPLS20W

CC cDNA library of foetal liver-spleen. The polypeptide is capable of

CC binding IL-1 receptors (IL-1Rs). The polynucleotides and polypeptides can

CC be used for the prevention or treatment of disorders involving sepsis,

CC acute pancreatitis, endotoxemic shock, cytokine induced shock, rheumatoid

CC arthritis, chronic inflammatory arthritis, pancreatic cell damage from

CC diabetes mellitus type 1, graft versus host disease, inflammatory bowel

CC disease or inflammatory disease associated with pulmonary disease, other autoimmune

CC disease or chronic myelogenous leukemia or in the prevention of premature

CC labor secondary to intrauterine infections. They can also exhibit

CC activities such as e.g. nutritional activity, cytokine and cell

CC proliferation/differentiation activity, immune stimulating or

CC suppressing activity, hematopoiesis regulating activity, tissue growth

CC activity, activin/inhibin activity, chemotactic/chemokinetic activity,

CC hemostatic and thrombolytic activity, receptor/ligand activity, and

CC anti-inflammatory activity. The products can also be used for

XX detection, diagnosis and drug screening.

XX Sequence 80 AA;

Query Match 28.2%; Score 44; DB 20; Length 80;

Best Local Similarity 100.0%; Pred. No. 1.7e-39;

Matches 44; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 81 LEPVNIMELYLGAKESKFTFYRRDMGLTSFESAAYPGWFLCT 124

|||||

Db 5 lepvnimelylgakeskftfyrrdmgltsfesaaypgwflct 48

RESULT 12

AAB66663

ID AAB66663 standard; protein; 80 AA.

XX AAB66663;

XX 05-APR-2001 (first entry)

XX

DE

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KW

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OS

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PN

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PD

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XX

Protein encoded by B2HPLS20W cDNA library sequence #2.

Interleukin; IL-1 receptor; cancer; inflammation.

Homo sapiens.

WO200102571-A2.

11-JAN-2001.

07-JUL-2000; 2000WO-US18710.

07-JUL-1999; 99US-0348942.

13-OCT-1999; 99US-0417455.

08-DEC-1999; 99US-0457626.

10-MAR-2000; 2000US-0523552.

22-MAY-2000; 2000US-0576008.

(HYSE-) HYSEQ INC.

Ford J, Pace A;

WPI; 2001-071582/08.

Isolated nucleic acids encoding interleukin-1 (IL-1) receptor
 antagonist proteins (referred as IL-1Hyl), useful in the treatment of
 cancer, e.g. breast adenocarcinoma and brain tumors, and an
 inflammatory disease mediated by IL-18 -

Claim 1; Fig 3; 179pp; English.

The present invention relates to interleukin (IL)-1 receptor

antagonist proteins. IL-1Hyl is useful for treating cancer,

an inflammatory disease mediated by IL-18, inflammation

resulting from infection or allergic reactions, and inflammation

associated with chronic bronchitis, arthritis, diabetes or

endothelium.

Sequence 80 AA;

Query Match 28.2%; Score 44; DB 22; Length 80;

Best Local Similarity 100.0%; Pred. No. 1.7e-39;

Matches 44; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 81 LEPVNIMELYLGAKESKFTFYRRDMGLTSFESAAYPGWFLCT 124

|||||

Db 5 lepvnimelylgakeskftfyrrdmgltsfesaaypgwflct 48

RESULT 13

AAB35263

ID AAB35263 standard; Protein; 154 AA.

XX AAB35263;

XX 08-MAY-2001 (first entry)

XX Interleukin-IL1 recombinant protein #2.

XX Mouse; IL-1L; interleukin-1 locus; IL-1beta; IL-1receptor; psoriasis;

XX chromosome 2q13; inflammatory disease; heart disease; Graves' disease;

XX rheumatoid arthritis; inflammatory bowel disorder; diabetes; cancer;

XX osteoporosis; systemic lupus erythematosus; human.

XX Unidentified.

XX WO200105974-A2.

XX 25-JAN-2001.

XX 17-JUL-2000; 2000WO-US19508.

CC Interleukin-1 receptor antagonist-1 (hIL-1Ra) polypeptide, is new. The
 CC nucleic acids may be used in molecular engineering applications, e.g.
 CC hybridization assays and chromosome and gene mapping studies, for
 CC recombinantly producing the IL-1p polypeptide or for producing gene
 CC knock out animals to study the role of the protein in metabolism and
 CC disease processes (conversely, gene therapy protocols may be used to
 CC supplement a patient's production of the polypeptide or to rectify
 CC mutations that lead to the production of in active peptides). The
 CC peptides produced may be used to screen for and produce modulators (e.g.
 CC antibodies) of IL-1p protein expression and activity which may be use
 CC to treat disorders associated with inappropriate IL-1p expression and
 CC activity, such as inflammatory disorders, asthma, arthritis,
 CC osteoarthritis, sepsis, acute lung injury, adult respiratory distress
 CC syndrome, idiopathic pulmonary fibrosis, ischemic reperfusion disease,
 CC psoriasis, graft versus host disease and/or inflammatory bowel disease.
 XX
 SQ Sequence 155 AA;

Query Match 28.2%; Score 44; DB 21; Length 155;
 Best Local Similarity 100.0%; Pred. No. 3.3e-39;
 Matches 44; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 81 LEPVIMELYLGAKESKSTFYRRDMLTSSPESRAYPCWFLCT 124
 DB 80 lepvnimelylgakeskstfyrrdmltssfesaaypqwfclt 123

Search completed: May 22, 2002, 16:18:25
 Job time: 121 sec

GenCore version 4.5
Copyright (c) 1993 - 2000 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: May 22, 2002, 16:16:39 ; Search time 13.05 Seconds
(without alignments)
291.984 Million cell updates/sec

Title: US-09-770-528-2
Perfect score: 156
Sequence: 1 MVLGALCFRMDKSLKVL.....IPEDPAWDAPITDFYFQQCD 156

Scoring table:
Gapop 60.0 , Gapext 60.0
Searched: 231628 seqs, 24425594 residues
rd size : 12

Total number of hits satisfying chosen parameters: 5

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 1000 summaries

Database : Issued Patents AA.*
1: /cgn2_6/ptodata/2/1aa/5A_COMB.pep.*
2: /cgn2_6/ptodata/2/1aa/5B_COMB.pep.*
3: /cgn2_6/ptodata/2/1aa/6A_COMB.pep.*
4: /cgn2_6/ptodata/2/1aa/6B_COMB.pep.*
5: /cgn2_6/ptodata/2/1aa/PCTUS_COMB.pep.*
6: /cgn2_6/ptodata/2/1aa/backfiles1.pep.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	44	28.2	80	4	US-09-417-455-3
2	44	28.2	80	4	US-09-348-942-3
3	44	28.2	155	4	US-09-417-455-5
4	44	28.2	155	4	US-09-348-942-5
5	44	28.2	155	4	US-09-316-081-5

ALIGNMENTS

RESULT 1
US-09-417-455-3
; Sequence 3, Application US/09417455
; Patent No. 6294655
; GENERAL INFORMATION:
; APPLICANT: Ford, John
; APPLICANT: Pace, Ann
; TITLE OF INVENTION: A NOVEL INTERLEUKIN-1 RECEPTOR ANTAGONIST AND USES THEREOF
; FILE REFERENCE: 28110/36328
; CURRENT APPLICATION NUMBER: US/09/417,455
; CURRENT FILING DATE: 1999-10-13
; PRIOR APPLICATION NUMBER: US/09/348,942
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: PCT/US99/04291
; PRIOR FILING DATE: 1999-04-05
; PRIOR APPLICATION NUMBER: US/09/287,210
; PRIOR FILING DATE: 1999-04-05

; PRIOR APPLICATION NUMBER: US 09/251,370
; PRIOR FILING DATE: 1999-02-17
; PRIOR APPLICATION NUMBER: US 09/229,591
; PRIOR FILING DATE: 1999-01-13
; PRIOR APPLICATION NUMBER: US 09/127,698
; PRIOR FILING DATE: 1998-07-31
; PRIOR APPLICATION NUMBER: US 09/099,818
; PRIOR FILING DATE: 1998-06-19
; PRIOR APPLICATION NUMBER: US 09/082,364
; PRIOR FILING DATE: 1998-05-20
; PRIOR APPLICATION NUMBER: US 09/079,909
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: US 09/055,010
; PRIOR FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 30
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 80
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-417-455-3

Query Match 28.2%; Score 44; DB 4; Length 80;
Best Local Similarity 100.0%; Pred. No. 2.2e-38;
Matches 44; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 81 LEPVNMELYLGAKESKSTFYRRDMGLTSSFSFSAAYPGWFLCT 124
Db 5 LEPVNMELYLGAKESKSTFYRRDMGLTSSFSFSAAYPGWFLCT 48
|||||

RESULT 2
US-09-348-942-3
; Sequence 3, Application US/09348942
; Patent No. 6337072
; GENERAL INFORMATION:
; APPLICANT: John Ford
; TITLE OF INVENTION: A NOVEL INTERLEUKIN-1 RECEPTOR ANTAGONIST AND USES THEREOF
; FILE REFERENCE: 28110/35801
; CURRENT APPLICATION NUMBER: US/09/348,942
; CURRENT FILING DATE: 1999-07-07
; EARLIER APPLICATION NUMBER: PCT/US99/04291
; EARLIER FILING DATE: 1999-04-05
; EARLIER APPLICATION NUMBER: US 09/287,210
; EARLIER FILING DATE: 1999-04-05
; EARLIER APPLICATION NUMBER: US 09/251,370
; EARLIER FILING DATE: 1999-02-17
; EARLIER APPLICATION NUMBER: US 09/229,591
; EARLIER FILING DATE: 1999-01-13
; EARLIER APPLICATION NUMBER: US 09/127,698
; EARLIER FILING DATE: 1998-07-31
; EARLIER APPLICATION NUMBER: US 09/099,818
; EARLIER FILING DATE: 1998-06-19
; EARLIER APPLICATION NUMBER: US 09/082,364
; EARLIER FILING DATE: 1998-05-20
; EARLIER APPLICATION NUMBER: US 09/079,909
; EARLIER FILING DATE: 1998-05-15
; EARLIER APPLICATION NUMBER: US 09/055,010
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 30
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 80
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-348-942-3

Query Match 28.2%; Score 44; DB 4; Length 80;
Best Local Similarity 100.0%; Pred. No. 2.2e-38;
Matches 44; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 81 LEPVNIMELYLGAKESKSFYRRDMGLTSSFSAAYPGWFLCT 124
 ||||||||||||||||||||||||||||||||||||||||||||
 Db 5 LEPVNIMELYLGAKESKSFYRRDMGLTSSFSAAYPGWFLCT 48

RESULT 3
 US-09-417-455-5
 ; Sequence 5, Application US/09417455
 ; Patent No. 6294655
 ; GENERAL INFORMATION:
 ; APPLICANT: Ford, John
 ; TITLE OF INVENTION: A NOVEL INTERLEUKIN-1 RECEPTOR ANTAGONIST AND USES THEREOF
 ; FILE REFERENCE: 28110/36328
 ; CURRENT APPLICATION NUMBER: US/09/417,455
 ; PRIOR APPLICATION NUMBER: US/09/348,942
 ; PRIOR FILING DATE: 1999-07-07
 ; PRIOR APPLICATION NUMBER: PCT/US99/04291
 ; PRIOR FILING DATE: 1999-04-05
 ; PRIOR APPLICATION NUMBER: US/09/287,210
 ; PRIOR FILING DATE: 1999-04-05
 ; PRIOR APPLICATION NUMBER: US/09/251,370
 ; PRIOR FILING DATE: 1999-02-17
 ; PRIOR APPLICATION NUMBER: US/09/229,591
 ; PRIOR FILING DATE: 1999-01-13
 ; PRIOR APPLICATION NUMBER: US/09/127,698
 ; PRIOR FILING DATE: 1998-07-31
 ; PRIOR APPLICATION NUMBER: US/09/099,818
 ; PRIOR FILING DATE: 1998-06-19
 ; PRIOR APPLICATION NUMBER: US/09/082,364
 ; PRIOR FILING DATE: 1998-05-20
 ; PRIOR APPLICATION NUMBER: US/09/079,909
 ; PRIOR FILING DATE: 1998-05-15
 ; PRIOR APPLICATION NUMBER: US/09/055,010
 ; PRIOR FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 30
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 5
 ; LENGTH: 155
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-09-417-455-5

Query Match 28.2%; Score 44; DB 4; Length 155;
 Best Local Similarity 100.0%; Pred. No. 3.9e-38;
 Matches 44; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 81 LEPVNIMELYLGAKESKSFYRRDMGLTSSFSAAYPGWFLCT 124
 ||||||||||||||||||||||||||||||||||||||||||||
 Db 80 LEPVNIMELYLGAKESKSFYRRDMGLTSSFSAAYPGWFLCT 123

RESULT 4
 US-09-348-942-5
 ; Sequence 5, Application US/09348942
 ; Patent No. 6337072
 ; GENERAL INFORMATION:
 ; APPLICANT: John Ford
 ; TITLE OF INVENTION: A NOVEL INTERLEUKIN-1 RECEPTOR ANTAGONIST AND USES THEREOF
 ; FILE REFERENCE: 28110/35801
 ; CURRENT APPLICATION NUMBER: US/09/348,942
 ; CURRENT FILING DATE: 1999-07-07
 ; PRIOR APPLICATION NUMBER: PCT/US99/04291
 ; EARLIER FILING DATE: 1999-04-05
 ; EARLIER APPLICATION NUMBER: US/09/287,210
 ; EARLIER FILING DATE: 1999-04-05
 ; EARLIER APPLICATION NUMBER: US/09/251,370
 ; EARLIER FILING DATE: 1999-02-17
 ; EARLIER APPLICATION NUMBER: US/09/229,591
 ; EARLIER FILING DATE: 1999-01-13
 ; EARLIER APPLICATION NUMBER: US/09/127,698

; EARLIER FILING DATE: 1998-07-31
 ; EARLIER APPLICATION NUMBER: US/09/099,818
 ; EARLIER FILING DATE: 1998-06-19
 ; EARLIER APPLICATION NUMBER: US/09/082,364
 ; EARLIER FILING DATE: 1998-05-20
 ; EARLIER APPLICATION NUMBER: US/09/079,909
 ; EARLIER FILING DATE: 1998-05-15
 ; EARLIER APPLICATION NUMBER: US/09/055,010
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 30
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 5
 ; LENGTH: 155
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-09-348-942-5

Query Match 28.2%; Score 44; DB 4; Length 155;
 Best Local Similarity 100.0%; Pred. No. 3.9e-38;
 Matches 44; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 81 LEPVNIMELYLGAKESKSFYRRDMGLTSSFSAAYPGWFLCT 124
 ||||||||||||||||||||||||||||||||||||||||||||
 Db 80 LEPVNIMELYLGAKESKSFYRRDMGLTSSFSAAYPGWFLCT 123

RESULT 5
 US-09-316-081-5
 ; Sequence 5, Application US/09316081
 ; Patent No. 6339141
 ; GENERAL INFORMATION:
 ; APPLICANT: Ballinger, Dennis G.
 ; APPLICANT: Pace, Ann M.
 ; TITLE OF INVENTION: Interleukin-1 Hy2 Materials and Methods
 ; FILE REFERENCE: 28110/35659
 ; CURRENT APPLICATION NUMBER: US/09/316,081
 ; CURRENT FILING DATE: 1999-05-20
 ; NUMBER OF SEQ ID NOS: 11
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 5
 ; LENGTH: 155
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-09-316-081-5

Query Match 28.2%; Score 44; DB 4; Length 155;
 Best Local Similarity 100.0%; Pred. No. 3.9e-38;
 Matches 44; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 81 LEPVNIMELYLGAKESKSFYRRDMGLTSSFSAAYPGWFLCT 124
 ||||||||||||||||||||||||||||||||||||||||||||
 Db 80 LEPVNIMELYLGAKESKSFYRRDMGLTSSFSAAYPGWFLCT 123

Search completed: May 22, 2002, 16:18:44
 Job time: 125 sec

GenCore version 4.5
Copyright (c) 1993 - 2000 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: May 22, 2002, 16:18:30 ; Search time 27.05 Seconds
(without alignments)
997.679 Million cell updates/sec

Title: US-09-770-528-2
Perfect score: 156
Sequence: 1 MMVLSGALCFRKMDSALKVL.....IPEDPAWDAPITDFYFQOCD 156

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 562222 seqs, 172994929 residues

rd size : 12

Total number of hits satisfying chosen parameters: 3

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 1000 summaries

Database : SPTREMBL_19:*
1: sp.archaea:*
2: sp.bacteria:*
3: sp.fungi:*
4: sp.human:*
5: sp.invertebrate:*
6: sp.mammal:*
7: sp.mhc:*
8: sp.organelle:*
9: sp.phage:*
10: sp.plant:*
11: sp.prodent:*
12: sp.virus:*
13: sp.vertibrate:*
14: sp.unclassified:*
15: sp.virus:*
16: sp.bacteriap:*
17: sp.archaea:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	156	100.0	156	11	O9JIG2
2	155	99.4	155	11	O9QYI1
3	44	28.2	155	4	Q9UBH0

ALIGNMENTS

RESULT 1
O9JIG2
ID O9JIG2 PRELIMINARY; PRT; 156 AA.
AC O9QYI1
DT 01-OCT-2000 (Tremblrel. 15, Created)
DT 01-OCT-2000 (Tremblrel. 15, Last sequence update)
DT 01-DEC-2001 (Tremblrel. 19, Last annotation update)
DE INTERLEUKIN-1 DELTA (INTERLEUKIN 1 RECEPTOR ANTAGONIST HOMOLOG

DE 1).
GN IL1F5 OR IL1HV1.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RA Debets R., Timans J.C., Zurawski S., Sana T.R., Bazan F.,
RA Kastelein R.A.;
RT "Novel IL-1 ligands IL-1d and IL-1e use IL-1R related protein 2.";
RL Submitted (FEB-2000) to the EMBL/GenBank/DDBJ databases.
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=TONGUE, AND STOMACH;
RX MEDLINE=21085660; PubMed=11217851;
RA Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,
RA Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaoka I.,
RA Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaide I., Pesole G., Queckenbush J.,
RA Schiml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baidarelli R., Barsh G.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA Suzuki H., Toyooka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
RA Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohsaki S.,
RA Hayashizaki Y.;
RT "Functional annotation of a full-length mouse cDNA collection.";
RL Nature 409:685-690(2001).
DR EMBL: AF230378; AAF91275.1; -;
DR EMBL: AK009741; BAB26471.1; -;
DR EMBL: AK008977; BAB26002.1; -;
DR HSSP: P18510; 1ILR.
DR MGD: MGI:1859325; I11f5.
DR InterPro: IPR000975; Interleukin_1.
DR Pfam: PF00340; IL1; 1.
DR ProDom: PD002536; Interleukin_1; 1.
DR SMART: SM00125; IL1; 1.
DR PROSITE: PS00253; INTERLEUKIN_1; 1.
SQ SEQUENCE 156 AA; 17136 MW; A4D1EE2F93CF77A7 CRC64;

Query Match 100.0%; Score 156; DB 11; Length 156;
Best Local Similarity 100.0%; Pred. No. 1.5e-158;
Matches 156; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MMVLSGALCFRKMDSALKVLHNNOLLAGGLHAEKVIKGEISVVPNRALDASLSPVIL 60
Db 1 MMVLSGALCFRKMDSALKVLHNNOLLAGGLHAEKVIKGEISVVPNRALDASLSPVIL 60

Qy 61 GVQGSQCLSCGTEKGPILKLEPNIMELYLGAKESKSFYRRDMGLTSSFSAAYPGW 120
Db 61 GVQGSQCLSCGTEKGPILKLEPNIMELYLGAKESKSFYRRDMGLTSSFSAAYPGW 120

Qy 121 FLCTSPDAQPVRLTQIPEDPAWDAPITDFYFQOCD 156
Db 121 FLCTSPDAQPVRLTQIPEDPAWDAPITDFYFQOCD 156

RESULT 2
O9QYI1
ID O9QYI1 PRELIMINARY; PRT; 155 AA.
AC O9QYI1
DT 01-MAY-2000 (Tremblrel. 13, Created)
DT 01-MAY-2000 (Tremblrel. 13, Last sequence update)
DT 01-DEC-2001 (Tremblrel. 19, Last annotation update)

DE IL-1L1 PROTEIN (INTERLEUKIN-1 HOMOLOG 3).
GN IL1F5 OR IL1H1.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RA Barton J.L., Nicklin M.J.H.;
RT "IL-1L1: A Novel Member of the Interleukin-1 Gene Family is Expressed
in Trophoblasts and Macrophages";
RL Submitted (OCT-1999) to the EMBL/GenBank/DBJ databases.
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=20209405; PubMed=10744718;
RA Kumar S., McDonnell P.C., Lehr R., Tierney L., Taimas M.N.,
RA Griswold D.E., Capper E.A., Tal-Singer R., Wells G.I., Doyle M.L.,
RA Young P.R.;
RT "Identification and initial characterization of four novel members of
the interleukin-1 family";
RL J. Biol. Chem. 275:10308-10314(2000).
DR EMBL; AJ250429; CAB59831.1; -;
DR EMBL; AF200495; AAF69251.1; -;
DR HSP; P18510; IL1R.
DR MGD; MGI:1859325; IL1F5.
DR InterPro; IPR000975; Interleukin_1.
DR Pfam; PF00340; IL1; 1.
DR ProDom; PD002536; Interleukin_1; 1.
DR SMART; SM00125; IL1; 1.
DR PROSITE; PS00253; INTERLEUKIN_1; 1.
DR SEQUENCE 155 AA; 17004 MW; A4B1770F2E12533A CRC64;
SQ

Query Match 99.4%; Score 155; DB 11; Length 155;
Best Local Similarity 100.0%; Pred. No. 1.7e-157;
Matches 155; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 MVLSGALCFRMKDSALKVLYLHNNOLLAGLHAERKVIKGEISVVPNRALDASLSPVILG 61
DB 1 MVLSGALCFRMKDSALKVLYLHNNOLLAGLHAERKVIKGEISVVPNRALDASLSPVILG 60

QY 62 VGGSGQLSCGTEKGPILKLEPVNIMELYLGAKESKFTFYRRDMLGTSFESAAYPGWGF 121
DB 61 VGGSGQLSCGTEKGPILKLEPVNIMELYLGAKESKFTFYRRDMLGTSFESAAYPGWGF 120

QY 122 LCTSPADQPVRLTQIPEDPANDAPITDFYFOQCD 156
DB 121 LCTSPADQPVRLTQIPEDPANDAPITDFYFOQCD 155

RESULT 3
Q9UBH0 PRELIMINARY; PRT; 155 AA.
AC Q9UBH0;
DT 01-MAY-2000 (Tremblrel. 13, Created)
DT 01-MAY-2000 (Tremblrel. 13, Last sequence update)
DT 01-OCT-2001 (Tremblrel. 18, Last annotation update)
DE F1L1 DELTA (INTERLEUKIN-1 LIKE PROTEIN 1) (INTERLEUKIN-1 RECEPTOR
ANTAGONIST HOMOLOG 1) (INTERLEUKIN-1 DELTA).
GN IL1H1 OR IL1L1.
OS Homo sapiens (human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=20092888; PubMed=10625660;
RA Smith D.E., Renshaw B.R., Ketchum R.R., Kubin M., Garika K.E.,
RA Sims J.E.;
RT "Four New Members Expand the IL-1 Superfamily";
RL J. Biol. Chem. 275:1169-1175(2000).
RN [2]
RP SEQUENCE FROM N.A.

RX MEDLINE=99443727; PubMed=10512743;
RA Mulero J.J., Pace A.M., Nelken S.T., Loeb D.B., Correa T.R.,
RA Drmanac R., Ford J.E.;
RT "IL1H1: A Novel Interleukin-1 Receptor Antagonist Gene";
RL Biochem. Biophys. Res. Commun. 263:702-706(1999).
RN [3]
RP SEQUENCE FROM N.A.
RC TISSUE=PLACENTA;
RA Barton J.L., di Giovine F.S., Symons J.A., Nicklin M.J.H.;
RT "A tissue specific interleukin-1 receptor antagonist homolog from the
IL1 cluster lacks IL-1, IL-1ra, IL-18 and IL-18ra activities";
RL Submitted (JUN-1999) to the EMBL/GenBank/DBJ databases.
RN [4]
RP SEQUENCE FROM N.A.
RA Barton J.L., Herbst R., Bosio D., Nicklin M.J.H.;
RT "A tissue specific interleukin-1 receptor antagonist homolog from the
IL-1 cluster lacks IL-1, IL-1ra, IL-18 and IL-18ra activities";
RL Submitted (JAN-2000) to the EMBL/GenBank/DBJ databases.
RN [5]
RP SEQUENCE FROM N.A.
RX MEDLINE=20322477; PubMed=10866108;
RA Mulero J.J., Nelken S.T., Ford J.E.;
RT "Organization of the Human Interleukin-1 Receptor Antagonist Gene
IL1H1";
RL Immunogenetics 51:425-428(2000).
RN [6]
RP SEQUENCE FROM N.A.
RA Debets R., Timans J.C., Zurawski S., Sana T.R., Bazan F.,
RA Kastelein R.A.;
RT "Novel IL-1 ligands IL-1d and IL-1e use IL-1R related protein 2";
RL Submitted (FEB-2000) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF201830; AAF25210.1; -;
DR EMBL; AF186094; AAF02757.1; -;
DR EMBL; AJ242737; CAB59822.1; -;
DR EMBL; AJ242738; CAB59823.1; -;
DR EMBL; AJ271338; CAB67704.1; -;
DR EMBL; AF216693; AAF76981.1; -;
DR EMBL; AF230377; AAF91274.1; -;
DR HSP; P18510; IL1R.
DR InterPro; IPR000975; Interleukin_1.
DR Pfam; PF00340; IL1; 1.
DR ProDom; PD002536; Interleukin_1; 1.
DR SMART; SM00125; IL1; 1.
DR PROSITE; PS00253; INTERLEUKIN_1; UNKNOWN_1.
KW Receptor.
SQ SEQUENCE 155 AA; 16962 MW; B96DB5EFA2612E25 CRC64;

Query Match 28.2%; Score 44; DB 4; Length 155;
Best Local Similarity 100.0%; Pred. No. 8e-39;
Matches 44; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 81 LEPVNIMELYLGAKESKFTFYRRDMLGTSFESAAYPGWFLCT 124
DB 80 LEPVNIMELYLGAKESKFTFYRRDMLGTSFESAAYPGWFLCT 123

Search completed: May 22, 2002, 16:21:51
Job time: 201 sec

GenCore version 4.5
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OM protein - protein search, using sw model

Run on: May 22, 2002, 14:05:33 ; Search time 29.87 seconds
(without alignments)
580.097 Million cell updates/sec

Title: US-09-770-528-2

Perfect score: 819

Sequence: 1 MVLGALCFRMDKALKVL.....IPEDPAWDAPITDFYQQCD 156

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 747574 seqs, 111073796 residues

all number of hits satisfying chosen parameters: 747574

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

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1: /SIDSL1/gcgdata/hold-geneseq/geneseq-emb1/AA1980.DAT.*
2: /SIDSL1/gcgdata/hold-geneseq/geneseq-emb1/AA1981.DAT.*
3: /SIDSL1/gcgdata/hold-geneseq/geneseq-emb1/AA1982.DAT.*
4: /SIDSL1/gcgdata/hold-geneseq/geneseq-emb1/AA1983.DAT.*
5: /SIDSL1/gcgdata/hold-geneseq/geneseq-emb1/AA1984.DAT.*
6: /SIDSL1/gcgdata/hold-geneseq/geneseq-emb1/AA1985.DAT.*
7: /SIDSL1/gcgdata/hold-geneseq/geneseq-emb1/AA1986.DAT.*
8: /SIDSL1/gcgdata/hold-geneseq/geneseq-emb1/AA1987.DAT.*
9: /SIDSL1/gcgdata/hold-geneseq/geneseq-emb1/AA1988.DAT.*
10: /SIDSL1/gcgdata/hold-geneseq/geneseq-emb1/AA1989.DAT.*
11: /SIDSL1/gcgdata/hold-geneseq/geneseq-emb1/AA1990.DAT.*
12: /SIDSL1/gcgdata/hold-geneseq/geneseq-emb1/AA1991.DAT.*
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14: /SIDSL1/gcgdata/hold-geneseq/geneseq-emb1/AA1993.DAT.*
15: /SIDSL1/gcgdata/hold-geneseq/geneseq-emb1/AA1994.DAT.*
16: /SIDSL1/gcgdata/hold-geneseq/geneseq-emb1/AA1995.DAT.*
17: /SIDSL1/gcgdata/hold-geneseq/geneseq-emb1/AA1996.DAT.*
18: /SIDSL1/gcgdata/hold-geneseq/geneseq-emb1/AA1997.DAT.*
19: /SIDSL1/gcgdata/hold-geneseq/geneseq-emb1/AA1998.DAT.*
20: /SIDSL1/gcgdata/hold-geneseq/geneseq-emb1/AA1999.DAT.*
21: /SIDSL1/gcgdata/hold-geneseq/geneseq-emb1/AA2000.DAT.*
22: /SIDSL1/gcgdata/hold-geneseq/geneseq-emb1/AA2001.DAT.*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	819	100.0	156	19	AAW86284
2	819	100.0	156	20	AAW86284
3	819	100.0	156	21	AAW86284
4	819	100.0	156	21	AAW86284
5	814	99.4	155	21	AAW86284
6	814	99.4	155	22	AAW86284
7	814	99.4	155	22	AAW86284
8	814	99.4	155	22	AAW86284
9	809	98.8	154	22	AAW86284
10	734	89.6	155	20	AAW86284
11	734	89.6	155	21	AAW86284

12	734	89.6	155	21	AAW86284	Human IL-1 homolog
13	734	89.6	155	21	AAW86284	Human TANGO-93 pro
14	734	89.6	155	22	AAW86284	Human interleukin-
15	734	89.6	155	22	AAW86284	Human PRO4342. Ho
16	734	89.6	155	22	AAW86284	Human IL-1IL1. Hom
17	734	89.6	155	22	AAW86284	Interleukin-IL1 re
18	734	89.6	155	22	AAW86284	Protein encoded by
19	731	89.3	155	20	AAW86284	A human interleuki
20	729	89.0	154	22	AAW86284	Interleukin-IL1 re
21	729	89.0	157	22	AAW86284	Human IL-1 homolog
22	727	88.8	155	21	AAW86284	Human IL-1 homolo
23	723	88.3	155	21	AAW86284	Generic human IL-1
24	716	87.4	155	21	AAW86284	Human IL-1 recept
25	716	87.4	155	21	AAW86284	Novel human diagno
26	501.5	61.2	258	22	AAW86284	Murine IL-1 recept
27	474	57.9	94	22	AAW86284	A human interleuki
28	465.5	56.8	104	22	AAW86284	Human IL-1 recept
29	393	48.0	80	20	AAW86284	Human IL-1 recept
30	393	48.0	80	22	AAW86284	Protein encoded by
31	344	42.0	98	21	AAW86284	Human IL-1 recepto
32	334	40.8	171	22	AAW86284	Interleukin-1 rece
33	319.5	39.0	178	20	AAW86284	Mouse interleukin-
34	319.5	39.0	178	22	AAW86284	Mouse interleukin-
35	316.5	38.6	154	22	AAW86284	Human interleukin-
36	316.5	38.6	178	20	AAW86284	Mouse interleukin-
37	312	38.1	152	22	AAW86284	Mouse interleukin-
38	312	38.1	152	22	AAW86284	Mouse interleukin-
39	312	38.1	152	22	AAW86284	Mouse interleukin-
40	310.5	37.9	159	16	AAW86284	Mouse interleukin-
41	309	37.7	152	22	AAW86284	Human IL-1 theta
42	309	37.7	152	22	AAW86284	Human IL-1 theta
43	309	37.7	152	22	AAW86284	Human IL-1 theta
44	309	37.7	169	22	AAW86284	Human interleukin-
45	309	37.7	180	22	AAW86284	Human IL-1 delta h

ALIGNMENTS

RESULT 1
AAW86284
ID AAW86284 standard; Protein; 156 AA.

AC AAW86284;

DT 19-FEB-1999 (first entry)

XX Rodent interleukin (IL)-1 delta polypeptide.

XX Interleukin; IL-1 delta; polyclonal antibody; IL-1 epsilon; cytokine;
XX Inflammatory response; immune system; diagnosis; agonist; antagonist;
XX chemokine.

OS Mus sp.

PN WO9847921-A1.

PD 29-OCT-1998.

PF 17-APR-1998; 98WO-US06879.

PR 06-AUG-1997; 97US-0055111.
PR 21-APR-1997; 97US-0837627.

XX (SCHE) SCHERING CORP.

PI Bazan JF, Hedrick JA, Kastelein RA, Sana TR;

XX WPI; 1998-609976/51.
XX N-PSDB; AAW71958.

PT Mammalian interleukin 1-delta and 1-epsilon - useful for, e.g.
regulating the immune system and inflammatory responses

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Claim 1; Pages 89-90; 113pp; English.

This represents a rodent interleukin (IL)-1 delta polypeptide. The invention relates to a recombinant polypeptide that specifically binds polyclonal antibodies (Abs) generated against a 12 consecutive amino acid segment of IL-1 delta or IL-1 epsilon. Agonists or antagonists of these IL polypeptides are used to regulate a cell involved in an inflammatory response. The IL-1 delta or IL-1 epsilon polypeptides and peptides are used to produce Abs and antigen-Abs complexes. The polypeptides, Abs and the corresponding nucleic acids regulate development and/or the immune system, and can be used to diagnose and treat conditions associated with abnormal expression of IL. Agonists or antagonists of IL-1 delta or IL-1 epsilon polypeptides are used with agonists or antagonists of IL-1 alpha, IL-1 beta, IL-1 gamma, IL-2 and/or IL-12. The IL-1 delta or IL-1 epsilon polypeptides may be used as a soluble polypeptide or as a fusion protein with another cytokine or chemokine.

Sequence 156 AA;

Query Match 100.0%; Score 819; DB 19; Length 156;
Best Local Similarity 100.0%; Pred. No. 2.7e-87;
Matches 156; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MMVLSGALCFRMKDSALKVLYLHNNQLLAGLHAKEVKGEEISVVPNRALDASLSPVIL 60
|||||
DB 1 mmvlsгалcfrmkdsalkvlylhnqllagglhaekvkgseisvvpnralspsvll 60
|||||

QY 61 GVQGGSCQLSCGTEKGPILKLEPVNIMELYLGAKESKSTFYRRDMGLTSSFESAAYPGW 120
|||||

DB 61 gvqggscqlscgtekqpilklepvnimelylgakeskstfyrddmgltsfesaaypgw 120
|||||

QY 121 FLCTSPADQPVRLTQIPEDPAWDAPITDFYFQQCD 156
|||||

DB 121 flctspadqpvriltqipepdawdapitdfyfqqcd 156
|||||

RESULT 2
AAY28407
ID AAY28407 standard; Protein; 156 AA.
XX
AC AAY28407;
XX
XX
DT 28-SEP-1999 (first entry)
XX
XX
DE Mouse interleukin 1 delta.
XX
XX
KW Interleukin 1 delta; IL-1 delta; glaucoma; ectodermal dysplasia;
KW Insulin-dependent diabetes mellitus; wrinkly skin syndrome;
KW T-cell leukemia; lymphoma; tibial muscular dystrophy.
XX
XX
OS Mus musculus.
XX
PN WO9935268-A1.
XX
XX
PD 15-JUL-1999.
XX
XX
PF 08-JAN-1999; 99WO-US00514.
XX
XX
PR 01-JUN-1998; 98US-0087393.
PR 09-JAN-1998; 98US-0071074.
XX
XX
XX (IMMV) IMMUNEX CORP.
XX
XX
PI Sims JE;
XX
DR WPI: 1999-458310/38.
DR N-PSDB; AAY89431.
XX
XX Murine and Human interleukin 1 delta DNA, polypeptides and its fragments, useful as molecular weight markers

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Claim 1; Page 67; 72pp; English.

The present sequence represents mouse interleukin 1 delta (IL-1 delta). IL-1 delta proteins are useful for the determination of the molecular weight of a sample protein. The protein and its fragments are useful as controls for peptide fragmentation. This is useful for determining the isoelectric point of a sample protein. Antibodies generated against IL-1 delta and its fragmented peptides can be used to enhance the accuracy of these molecular weight markers to determine the apparent molecular eight and isoelectric point of a sample protein. IL-1 delta can be used to screen for potential inhibitors of activity associated with IL-1 delta counter-structure molecules. IL-1 delta can also be used as therapeutic agents for the treatment of diseases mediated by IL-1 delta. IL-1 delta may be used as a reagent in studying the interleukin 1 (IL-1) signalling pathway, or as a reagent to block IL-1 signalling. The IL-1 delta coding sequences can be used to identify human chromosome 2, and to identify genes associated with certain diseases, especially with region 2q11-12, including glaucoma, ectodermal dysplasia, insulin-dependent diabetes mellitus, wrinkly skin syndrome, T-cell leukemia/lymphoma and tibial muscular dystrophy.

Sequence 156 AA;

Query Match 100.0%; Score 819; DB 20; Length 156;
Best Local Similarity 100.0%; Pred. No. 2.7e-87;
Matches 156; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MMVLSGALCFRMKDSALKVLYLHNNQLLAGLHAKEVKGEEISVVPNRALDASLSPVIL 60
|||||
DB 1 mmvlsгалcfrmkdsalkvlylhnqllagglhaekvkgseisvvpnralspsvll 60
|||||

QY 61 GVQGGSCQLSCGTEKGPILKLEPVNIMELYLGAKESKSTFYRRDMGLTSSFESAAYPGW 120
|||||

DB 61 gvqggscqlscgtekqpilklepvnimelylgakeskstfyrddmgltsfesaaypgw 120
|||||

QY 121 FLCTSPADQPVRLTQIPEDPAWDAPITDFYFQQCD 156
|||||

DB 121 flctspadqpvriltqipepdawdapitdfyfqqcd 156
|||||

RESULT 3
AAY92260
ID AAY92260 standard; Protein; 156 AA.
XX
AC AAY92260;
XX
XX
DT 10-AUG-2000 (first entry)
XX
XX
DE Murine IL-1 homologue, zilla3.
XX
XX
KW Generic; interleukin-1; IL-1; homologue; zilla3; anti-inflammatory;
KW antagonist; pro-inflammatory; agonist; immunomodulator; antiarthritic;
KW antirheumatic; osteopathic; antipsoriatic; antibacterial; cytostatic;
KW immunosuppressive; antiulcer; antidiabetic; nephrotropic; vasotropic;
KW vulnery; 2q14.
XX
XX
OS Mus musculus.
XX
XX
PN WO200020595-A1.
XX
XX
PD 13-APR-2000.
XX
XX
PF 08-OCT-1999; 99WO-US23533.
XX
XX
PR 08-OCT-1998; 98US-0169745.
XX
XX
XX (ZYMO) ZYMOGENETICS INC.
XX
XX Sheppard PO, West RR, Clegg CH;
XX
XX WPI: 2000-303780/26.
DR N-PSDB; AAA09198.

XX Proteins useful for treatment of inflammatory conditions such as
 PT rheumatoid arthritis and psoriasis are agonists or antagonists forms of
 PT new interleukin-1 homologue
 XX
 XX Example 7; Page 59-60; 64pp; English.
 XX
 XX This shows an interleukin-1 (IL-1) homologue, designated zilla3. A 350
 CC bp probe generated from the DNA sequence by PCR using AAA09199-200 was
 CC used to analyze human northern blots.
 CC It is believed that zilla3 acts through IL-1 receptors. In general,
 CC zilla3 proteins having a Lys residue at position 148 will have
 CC anti-inflammatory activity (e.g. AA92256), whilst those having Asp
 CC (see AA92254) or Glu at this position will have pro-inflammatory
 CC action. Zilla3 is used to modulate an immune response in an animal
 CC (claimed). Antagonists zilla3 forms may be used to treat or prevent
 CC chronic inflammatory diseases such as rheumatoid arthritis,
 CC osteoarthritis and Lyme arthritis, psoriasis, to reduce tissue damage
 CC after ischemia, to treat septic shock, graft-versus-host disease and
 CC leukemia. The antagonists may also alleviate inflammatory bowel disease
 CC including Crohn's disease and ulcerative colitis, insulin-dependent
 CC diabetes mellitus, acute pancreatitis, glomerulonephritis and cerebral
 CC ischemia. Agonist forms of zilla3 may promote wound healing by IL-1
 CC effects on growth factor secretion and cell proliferation. They may also
 CC treat infections, especially gastrointestinal infections.
 XX Sequence 156 AA;

Query Match 100.0%; Score 819; DB 21; Length 156;
 Best Local Similarity 100.0%; Pred. No. 2.7e-87;
 Matches 156; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MMVLSGALCFRMDKSAKLVLYLHNNQLLAGLHAKEVKGEEISVVPNRALDASLSPVIL 60
 DB 1 mmvlsгалсfrmdksаlkvlуlhnqllаgglhaekvkgеeіsvvpnraldaslsрvіl 60
 QY 61 GVQGSQCLSCGTEKGPILKLEPNIMELYLGAKESKSTFYRRDMLTSSFESAAYPGW 120
 DB 61 gvqgsgclscgtekpgіlklepnmelуlgakeskstfуrrdmgtssfesaaypgw 120
 QY 121 FLCTSPEADQPVRLTOIPEDPAWDAPITDFYFQQCD 156
 DB 121 flctspеаdqpvrltqіpеdpawdaptіdfуfqcd 156

RESULT 4
 AAY45061
 AAY45061 standard; Protein; 156 AA.

AAY45061;

31-MAY-2000 (first entry)

Murine TANGO-93 protein.

TANGO-93; cytokine; mouse; secreted protein; IL-1 expression; cancer;
 Interleukin-1 receptor antagonist; IL-1ra; inflammation; antiasthmatic;
 immunosuppressive; antirheumatic; antiarthritic; antipsoriatic; asthma;
 anti-inflammatory; antibacterial; antiulcer; cytostatic; immunomodulator;
 osteopathic; dermatological; antidiabetic; psoriasis; ulcerative colitis;
 graft vs-host disease; rheumatoid arthritis; inflammatory bowel disease;
 septic shock; cachexia; Crohn's disease; chronic myelogenous leukemia;
 liver disease; diabetes; osteoarthritis; Hodgkin's disease; Lyme disease;
 autoimmune disease; myasthenia gravis; pharmacogenomic; diagnosis;
 systemic lupus erythematosus; forensic; transgenic animal.

Mus sp.

WO200008045-A2.

17-FEB-2000.

PF 06-AUG-1999; 99WO-US17886.
 XX
 PR 07-AUG-1998; 98US-0131263.
 XX
 PA (MILL-) MILLENNIUM BIOTHERAPEUTICS INC.
 XX
 XX Pan Y;
 PI
 XX WPI: 2000-205669/18.
 DR N-PSDB; AA250811.
 XX

XX Isolated nucleic acid sequences encoding TANGO-93 polypeptide useful
 PT for treating a variety of cellular processes e.g. asthma, rheumatoid
 PT arthritis, psoriasis and autoimmune diseases
 XX
 PS Claim 9; Fig 1; 113pp; English.

XX The present sequence is the murine TANGO-93, a secreted protein, that
 CC belongs to the cytokine superfamily. It plays a role similar to secreted
 CC Interleukin-1 receptor antagonist (IL-1ra) and its expression is
 CC developmentally regulated in liver, heart and bone marrow. TANGO-93
 CC modulates immune mediated inflammation and IL-1 gene or protein
 CC expression. TANGO-93 is useful as a modulating agent for regulating
 CC cellular processes like asthma, graft vs-host disease, rheumatoid
 CC arthritis, psoriasis, inflammatory bowel disease, septic shock,
 CC ulcerative colitis, Crohn's disease, chronic myelogenous Leukaemia,
 CC cachexia, and autoimmune diseases e.g. myasthenia gravis, Lyme disease,
 CC diabetes and systemic lupus erythematosus. Partial TANGO-93 sequences
 CC are useful in forensic biology, for diagnostic and prognostic assays,
 CC prophylactic and therapeutic treatment and pharmacogenomics. The DNA
 CC sequences are useful as hybridisation probes and primers, for isolation
 CC of TANGO-93 sequence and for the creation of transgenic animals.

XX Sequence 156 AA;

Query Match 100.0%; Score 819; DB 21; Length 156;
 Best Local Similarity 100.0%; Pred. No. 2.7e-87;
 Matches 156; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MMVLSGALCFRMDKSAKLVLYLHNNQLLAGLHAKEVKGEEISVVPNRALDASLSPVIL 60
 DB 1 mmvlsгалсfrmdksаlkvlуlhnqllаgglhaekvkgеeіsvvpnraldaslsрvіl 60
 QY 61 GVQGSQCLSCGTEKGPILKLEPNIMELYLGAKESKSTFYRRDMLTSSFESAAYPGW 120
 DB 61 gvqgsgclscgtekpgіlklepnmelуlgakeskstfуrrdmgtssfesaaypgw 120
 QY 121 FLCTSPEADQPVRLTOIPEDPAWDAPITDFYFQQCD 156
 DB 121 flctspеаdqpvrltqіpеdpawdaptіdfуfqcd 156

RESULT 5

AAY96937

ID AAY96937 standard; Protein; 155 AA.

XX AAY96937;

31-OCT-2000 (first entry)

Murine IL-1 receptor antagonist 3.

XX mL-1ra3; interleukin-1 receptor antagonist-3; IL-1lp; osteopathic;
 KW interleukin-1-like polypeptide; anti-inflammatory; anti-asthmatic;
 KW anti-arthritis; antimicrobial; respiratory; anti-ischemic; vaccine;
 KW dermatological; immunomodulatory; gastrointestinal; gene therapy.

XX Mus sp.

XX WO200039297-A2.

XX

PD 06-JUL-2000.
XX
PF 22-DEC-1999; 99WO-US30720.
XX
PR 23-DEC-1998; 98US-0113430.
PR 22-JAN-1999; 99US-0116843.
PR 13-APR-1999; 99US-0129122.
XX
PA (GETH) GENENTECH INC.
XX
PI Goddard A, Pan J;
XX
XX WPI; 2000-452395/39.
DR N-PSDB; AAA51599.
XX
XX Nucleic acids encoding interleukin-1-like polypeptides, useful for
PT preventing and treating e.g. inflammation, asthma and psoriasis
PT
XX
PS Claim 22; Fig 9A-B; 143pp; English.
XX
XX An isolated nucleic acid molecule encoding an interleukin-1-like
XX polypeptide (IL-1lp) that retains one or more activities of the peptide
XX from which it is derived, such as the IL-18R binding activity of a human
XX interleukin-1 receptor antagonist-1 (hIL-1ra1) polypeptide, is new. The
XX nucleic acids may be used in molecular engineering applications, e.g.
XX hybridization assays and chromosome and gene mapping studies, for
XX recombinantly producing the IL-1lp polypeptide or for producing gene
XX knock out animals to study the role of the protein in metabolism and
XX disease processes (conversely, gene therapy protocols may be used to
XX supplement a patient's production of the polypeptide or to rectify
XX mutations that lead to the production of in active peptides). The
XX peptides produced may be used to screen for and produce modulators (e.g.
XX antibodies) of IL-1lp protein expression and activity which may be use
XX to treat disorders associated with inappropriate IL-1lp expression and
XX activity, such as inflammatory disorders, asthma, arthritis,
XX osteoarthritis, sepsis, acute lung injury, adult respiratory distress
XX syndrome, idiopathic pulmonary fibrosis, ischemic reperfusion disease,
XX psoriasis, graft versus host disease and/or inflammatory bowel disease.
XX
SQ Sequence 155 AA;

Query Match 99.4%; Score 814; DB 21; Length 155;
Best Local Similarity 100.0%; Pred. No. 1e-86;
Matches 155; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 MVLGALCFRMDKSAKLVLYLHNNQLLAGLHAEKVIKGEISVVPNRDALDASLSPVILG 61
DB 1 mvlsgalcfmrkdsalkvlylhnnqlaggllhaekvikgeisvvpnraldaslsplvg 60

QY 62 VQGSQCLSCGTEKGPILKLEPVNIMELYLGAKESKFTFYRRDMGLTSSFESAAYPGWF 121
DB 61 vqgsqclscgtekqgpilklepvnimelylgakeskftfyrrdmgltsfesaaypgwf 120

QY 122 LCTSPADQPVRLTQIPEDPAWDAPITDFYFQQCD 156
DB 121 lctspadqpvrltqipdpawdapitdfyfqqcd 155

RESULT 6
AAB35261
ID AAB35261 standard; Protein; 155 AA.
XX
AC AAB35261;
XX
DT 08-MAY-2001 (first entry)
XX
DE Murine IL-1L1.
XX
KW Mouse; IL-1L1; Interleukin-1 locus; IL-1beta; IL-1receptor; psoriasis;
KW chromosome 2q13; inflammatory disease; heart disease; Graves' disease;
KW rheumatoid arthritis; inflammatory bowel disorder; diabetes; cancer;
KW osteoporosis; systemic lupus erythematosus.

XX
OS Mus sp.
XX
PN WO200105974-A2.
XX
PD 25-JAN-2001.
XX
XX 17-JUL-2000; 2000WO-US19508.
XX
PR 16-JUL-1999; 99US-0144298.
XX
XX (INTE-) INTERLEUKIN GENETICS INC.
XX
XX Nicklin M, Barton J;
XX
XX WPI; 2001-091974/10.
DR
XX Nucleic acids encoding human and murine interleukin-1l1 polypeptides
PT useful for controlling inflammatory processes -
PT
XX
XX Claim 11; Fig 3; 150pp; English.
XX
XX The present invention provides the protein and coding sequences of the
XX human and murine interleukin-1l1 (IL-1l1) proteins. The IL-1l1 gene is
XX located between the IL-1beta and IL-1receptor genes at human chromosome
XX 2q13. The sequences are useful in the diagnosis, prevention and treatment
XX of heart disease, cancer and inflammatory diseases such as rheumatoid
XX arthritis, systemic lupus erythematosus, inflammatory bowel disorder,
XX diabetes, psoriasis, osteoporosis, lichen sclerosis, ulcerative colitis,
XX severe periodontal disease and pregnancy complications. The present
XX sequence is the murine IL-1l1 protein.
XX
SQ Sequence 155 AA;

Query Match 99.4%; Score 814; DB 22; Length 155;
Best Local Similarity 100.0%; Pred. No. 1e-86; Indels 0; Gaps 0;
Matches 155; Conservative 0; Mismatches 0;

QY 2 MVLGALCFRMDKSAKLVLYLHNNQLLAGLHAEKVIKGEISVVPNRDALDASLSPVILG 61
DB 1 mvlsgalcfmrkdsalkvlylhnnqlaggllhaekvikgeisvvpnraldaslsplvg 60

QY 62 VQGSQCLSCGTEKGPILKLEPVNIMELYLGAKESKFTFYRRDMGLTSSFESAAYPGWF 121
DB 61 vqgsqclscgtekqgpilklepvnimelylgakeskftfyrrdmgltsfesaaypgwf 120

QY 122 LCTSPADQPVRLTQIPEDPAWDAPITDFYFQQCD 156
DB 121 lctspadqpvrltqipdpawdapitdfyfqqcd 155

RESULT 7
AAB66672
ID AAB66672 standard; protein; 155 AA.
XX
AC AAB66672;
XX
DT 05-APR-2001 (first entry)
XX
DE Invention related sequence #4.
XX
KW Interleukin; IL-1 receptor; cancer; inflammation.
XX
OS Mus sp.
XX
XX WO200102571-A2.
XX
PD 11-JAN-2001.
XX
XX 07-JUL-2000; 2000WO-US18710.
PF
XX 07-JUL-1999; 99US-0348942.
PR

PD 09-AUG-2001.
 XX
 PF 01-FEB-2001; 2001WO-US03285.
 XX
 PR 02-FEB-2000; 2000US-0179638.
 XX
 PA (SCHE) SCHERING CORP.
 XX
 PI Debets JEMA, Timans JC, Bazan JF, Kastelein RA;
 XX
 DR WPI; 2001-48886/53.
 XX
 XX Novel isolated or recombinant antigenic interleukin-1 delta or epsilon
 PT polypeptide useful for treating conditions exhibiting abnormal
 PT expression of interleukin such as immunological disorders, tumor and
 PT allergy
 XX
 XX Disclosure; Fig 1; 103pp; English.
 PS
 CC The invention relates to recombinant antigenic interleukin-1 like
 CC molecules and their corresponding nucleic acid sequences, designated
 CC as interleukin-1delta (IL-1delta) and interleukin-1epsilon (IL-1epsilon).
 CC IL-1delta and IL-1epsilon are useful for treating conditions exhibiting
 CC abnormal expression of the interleukin such as immunological disorders,
 CC tumours, inflammatory disorders, fever, hypoglycaemia, psoriasis,
 CC allergy, autoimmune diseases and infectious diseases (e.g., pulmonary
 CC tuberculosis, leprosy, fulminant hepatitis, and viral infections such as
 CC HIV). The invention also relates to methods of using the composition
 CC containing IL-1delta or IL-1epsilon for both diagnostic and therapeutic
 CC utilities. IL-1delta is used as an immunogen for the production of
 CC antisera or antibodies specific, e.g., capable of distinguishing between
 CC IL-1 family members and an IL-1delta, for the interleukin or its
 CC fragment. The purified interleukin is used as a reagent to detect any
 CC antibodies generated in response to the presence of elevated levels of
 CC expression, or immunological disorders which lead to antibody production
 CC to the endogenous cytokine. The invention also contemplates the use of
 CC competitive drug screening assays. The present sequence is mouse
 CC interleukin-1delta (IL-1delta) protein related to the invention.
 XX
 SQ Sequence 154 AA;
 Query Match 98.8%; Score 809; DB 22; Length 154;
 Best Local Similarity 100.0%; Pred. No. 3.8e-86;
 Matches 154; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 3 VLGGALCFRMKDSALKVLYLHNNQLLAGLHAEKVIKGEISVVPNRALDASLSPVILG 62
 Db 1 vlsgalcfmksdalkvlylhnnqlaglhagkvikgeelsvvpnrldaslsplvg 60
 QY 63 QGGSQCLSCGTEKGPILKLEPVNIMELYLGAKESKSTFYRRDMLGTSFSAAYPGWFL 122
 Db 61 qggsqclscgtekpgilklepvnimelylgakeskstfyrddmgltsfsesaaypgwfl 120
 QY 123 CTSPEADQPVRLTQIPEDPAWDAPITDIFYFOQCD 156
 Db 121 ctspeadqpvrltqipdpawdapitdifyfgqcd 154
 RESULT 10
 AAY28408
 ID AAY28408 standard; Protein; 155 AA.
 XX
 AC AAY28408;
 XX
 DT 28-SEP-1999 (first entry)
 XX
 DE Human interleukin 1 delta.
 XX
 KW Interleukin 1 delta; IL-1 delta; glaucoma; ectodermal dysplasia;
 KW insulin-dependent diabetes mellitus; wrinkly skin syndrome;
 KW T-cell leukemia; lymphoma; tibial muscular dystrophy.
 XX

OS Homo sapiens.
 XX
 PN WO9935268-A1.
 XX
 PD 15-JUL-1999.
 XX
 PF 08-JAN-1999; 99WO-US00514.
 XX
 PR 01-JUN-1998; 98US-0087393.
 PR 09-JAN-1998; 98US-0071074.
 XX
 PA (IMMV) IMMUNEX CORP.
 XX
 XX Sims JE;
 PI
 XX WPI; 1999-458310/38.
 DR N-PSDB; AAX89432.
 DR
 XX Murine and Human interleukin 1 delta DNA, polypeptides and its
 PT fragments, useful as molecular weight markers
 PT
 PS Claim 1; Page 68-69; 72pp; English.
 CC The present sequence represents human interleukin 1 delta (IL-1 delta).
 CC IL-1 delta proteins are useful for the determination of the molecular
 CC weight of a sample protein. The protein and its fragments are useful as
 CC controls for peptide fragmentation. This is useful for determining the
 CC isoelectric point of a sample protein. Antibodies generated against
 CC IL-1 delta and its fragmented peptides can be used to enhance the
 CC accuracy of these molecular weight markers to determine the apparent
 CC molecular eight and isoelectric point of a sample protein. IL-1 delta
 CC can be used to screen for potential inhibitors of activity associated
 CC with IL-1 delta counter-structure molecules. IL-1 delta can also be used
 CC as therapeutic agents for the treatment of diseases mediated by IL-1
 CC delta. IL-1 delta may be used as a reagent in studying the interleukin 1
 CC (IL-1) signalling pathway, or as a reagent to block IL-1 signalling. The
 CC IL-1 delta coding sequences can be used to identify human chromosome 2,
 CC and to identify genes associated with certain diseases, especially with
 CC region 2q11-12, including glaucoma, ectodermal dysplasia, insulin-
 CC dependent diabetes mellitus, wrinkly skin syndrome, T-cell leukemia/
 CC lymphoma and tibial muscular dystrophy.
 XX
 SQ Sequence 155 AA;
 Query Match 89.6%; Score 734; DB 20; Length 155;
 Best Local Similarity 91.0%; Pred. No. 2.1e-77;
 Matches 141; Conservative 4; Mismatches 10; Indels 0; Gaps 0;
 QY 2 MVLSGALCFRMKDSALKVLYLHNNQLLAGLHAEKVIKGEISVVPNRALDASLSPVILG 61
 Db 1 mvlsгалcfmksdalkvlylhnnqlaglhagkvikgeelsvvpnrldaslsplvg 60
 QY 62 VOGGSQCLSCGTEKGPILKLEPVNIMELYLGAKESKSTFYRRDMLGTSFSAAYPGWF 121
 Db 61 vqgsqclscgvgeptltlepvnimelylgakeskstfyrddmgltsfsesaaypgwfl 120
 QY 122 LCTSPADQPVRLTQIPEDPAWDAPITDIFYFOQCD 156
 Db 121 lctvpeadqpvrltqipdpawdapitdifyfgqcd 155
 RESULT 11
 AAY96936
 ID AAY96936 standard; Protein; 155 AA.
 XX
 AC AAY96936;
 XX
 DT 31-OCT-2000 (first entry)
 XX
 DE Human IL-1 receptor antagonist 3.
 XX
 KW hIL-1ra3; human interleukin-1 receptor antagonist-3; IL-1lp; osteopathic;

XX 08-OCT-1998; 98US-0169745.
XX (ZYMO) ZYMOGENETICS INC.
XX Sheppard PO, West RR, Clegg CH;
XX WPI; 2000-303780/26.
XX N-PSDB; AAA09193, AAA09194.
XX Proteins useful for treatment of inflammatory conditions such as
XX rheumatoid arthritis and psoriasis are agonists or antagonists forms of
XX new interleukin-1 homologue
XX Disclosure; Page 52-53; 64pp; English.
XX This shows an interleukin-1 (IL-1) homologue, designated zilla3.
XX It is believed that zilla3 acts through IL-1 receptors. In general,
XX zilla3 proteins having a lys residue at position 148 will have
XX anti-inflammatory activity (e.g. AA92256), whilst those having Asp
XX (see AA92254) or Glu at this position will have pro-inflammatory
XX action. Zilla3 is used to modulate an immune response in an animal
XX (claimed). Antagonists zilla3 forms may be used to treat or prevent
XX chronic inflammatory diseases such as rheumatoid arthritis,
XX osteoarthritis and Lyme arthritis, psoriasis, to reduce tissue damage
XX after ischemia, to treat septic shock, graft-versus-host disease and
XX leukemia. The antagonists may also alleviate inflammatory bowel disease
XX including Crohn's disease and ulcerative colitis, insulin-dependent
XX diabetes mellitus, acute pancreatitis, glomerulonephritis and cerebral
XX ischemia. Agonist forms of zilla3 may promote wound healing by IL-1
XX effects on growth factor secretion and cell proliferation. They may also
XX treat infections, especially gastrointestinal infections.
XX Sequence 155 AA;

Query Match 89.6%; Score 734; DB 21; Length 155;
Best Local Similarity 91.0%; Pred. No. 2.1e-77;
Matches 141; Conservative 4; Mismatches 10; Indels 0; Gaps 0;
QY 2 MVLGALCFRMDKSAKLVYLNHNNQLLAGLHAEKVIKGEISVVPNRALDASLSPVILG 61
DB 1 MVLGALCFRMDKSAKLVYLNHNNQLLAGLHAEKVIKGEISVVPNRALDASLSPVILG 60
QY 62 VOGSGQCLSCGTEKGPILKLEPVNIMELYLGAKESKSFYRRDMGLTSFESAAYPGWF 121
DB 61 VGGGQCISCGVGGQPTLTLEPVNIMELYLGAKESKSFYRRDMGLTSFESAAYPGWF 120
QY 122 LCTSPADQPVRLTQIPEDPAWDAPITDFYFQQCD 156
DB 121 LCTVPEADQPVRLTQIPEDPAWDAPITDFYFQQCD 155

RESULT 13
AA45062
ID AA45062 standard; Protein; 155 AA.
XX AA45062;
XX 31-MAY-2000 (first entry)
XX Human TANGO-93 protein.
XX TANGO-93; cytokine; human; secreted protein; IL-1 expression; cancer;
XX Interleukin-1 receptor antagonist; IL-1ra; inflammation; antiasthmatic;
XX immunosuppressive; antirheumatic; antiarthritic; antipsoriatic; asthma;
XX antiinflammatory; antibacterial; antiulcer; cytostatic; immunomodulator;
XX osteopathic; dermatological; antidiabetic; psoriasis; ulcerative colitis;
XX graft vs-host disease; Rheumatoid arthritis; inflammatory bowel disease;
XX septic shock; cachexia; Crohn's disease; chronic myelogenous leukaemia;
XX liver disease; diabetes; osteoarthritis; Hodgkin's disease; Lyme disease;
XX autoimmune disease; myasthenia gravis; pharmacogenomic; diagnosis;
XX chromosome 2; systemic lupus erythematosus; forensic; transgenic animal.

XX Homo sapiens.
XX WO200008045-A2.
XX 17-FEB-2000.
XX 06-AUG-1999; 99WO-US17886.
XX 07-AUG-1998; 98US-0131263.
XX (MILL-) MILLENNIUM BIOTHERAPEUTICS INC.
XX Pan Y;
XX WPI; 2000-205669/18.
XX N-PSDB; AA250812.
XX Isolated nucleic acid sequences encoding TANGO-93 polypeptide useful
XX for treating a variety of cellular processes e.g. asthma, rheumatoid
XX arthritis, psoriasis and autoimmune diseases -
XX Claim 9; Fig 2; 113pp; English.

XX The present sequence is the human TANGO-93, a secreted protein that
XX belongs to the cytokine superfamily. It plays a role similar to secreted
XX Interleukin-1 receptor antagonist (IL-1ra) and its expression is
XX developmentally regulated in the uterus, placenta and skeletal muscles.
XX Human TANGO-93 gene is mapped to chromosome 2 within the IL-1 cluster.
XX TANGO-93 modulates immune mediated inflammation and IL-1 gene or protein
XX expression. TANGO-93 is useful as a modulating agent for regulating
XX cellular processes like asthma, graft vs-host disease, rheumatoid
XX arthritis, psoriasis, inflammatory bowel disease, septic shock,
XX cancer, liver disease, Hodgkin's disease, chronic myelogenous leukaemia,
XX cachexia, and autoimmune diseases e.g. myasthenia gravis, Lyme disease,
XX diabetes and systemic lupus erythematosus. Partial TANGO-93 sequences
XX are useful in forensic biology, for diagnostic and prognostic assays,
XX prophylactic and therapeutic treatment and pharmacogenomics. The DNA
XX sequences are useful as hybridisation probes and primers, for isolation
XX of TANGO-93 sequence and for the creation of transgenic animals.
XX Sequence 155 AA;

Query Match 89.6%; Score 734; DB 21; Length 155;
Best Local Similarity 91.0%; Pred. No. 2.1e-77;
Matches 141; Conservative 4; Mismatches 10; Indels 0; Gaps 0;
QY 2 MVLGALCFRMDKSAKLVYLNHNNQLLAGLHAEKVIKGEISVVPNRALDASLSPVILG 61
DB 1 MVLGALCFRMDKSAKLVYLNHNNQLLAGLHAEKVIKGEISVVPNRALDASLSPVILG 60
QY 62 VOGSGQCLSCGTEKGPILKLEPVNIMELYLGAKESKSFYRRDMGLTSFESAAYPGWF 121
DB 61 VGGGQCISCGVGGQPTLTLEPVNIMELYLGAKESKSFYRRDMGLTSFESAAYPGWF 120
QY 122 LCTSPADQPVRLTQIPEDPAWDAPITDFYFQQCD 156
DB 121 LCTVPEADQPVRLTQIPEDPAWDAPITDFYFQQCD 155

RESULT 14
AAE06655
ID AAE06655 standard; Protein; 155 AA.
XX AAE06655;
XX AAE06655;
XX 16-OCT-2001 (first entry)
XX Human Interleukin-1delta (IL-1delta) protein.
XX Human; interleukin-1delta; IL-1delta; virucide; hepatotropic; fever;

immunological disorder; tumour; inflammatory disorder; hypoglycaemia; autoimmune disease; pulmonary tuberculosis; fulminant hepatitis; leprosy; psoriasis; viral infection; allergy; cytokine; HIV; drug screening.
Homo sapiens.

Key
Location/Qualifiers
1..5
Binding-site
/note= "IL-1 receptor beta subunit binding region"
7
Binding-site
/note= "IL-1 receptor beta subunit binding region"
7..11
Region
/note= "Beta sheet region"
12
Binding-site
/note= "IL-1 receptor alpha subunit binding region"
14..16
Binding-site
/note= "IL-1 receptor alpha subunit binding region"
18..21
Region
/note= "Beta sheet region"
21..23
Binding-site
/note= "IL-1 receptor alpha subunit binding region"
26..29
Region
/note= "Beta sheet region"
27
Binding-site
/note= "IL-1 receptor alpha subunit binding region"
29..34
Binding-site
/note= "IL-1 receptor alpha subunit binding region"
36
Binding-site
/note= "IL-1 receptor alpha subunit binding region"
38
Binding-site
/note= "IL-1 receptor alpha subunit binding region"
42..47
Region
/note= "Beta sheet region"
47
Binding-site
/note= "IL-1 receptor beta subunit binding region"
49
Binding-site
/note= "IL-1 receptor beta subunit binding region"
53
Binding-site
/note= "IL-1 receptor beta subunit binding region"
55
Binding-site
/note= "IL-1 receptor beta subunit binding region"
56..61
Region
/note= "Beta sheet region"
66..71
Region
/note= "Beta sheet region"
77..82
Region
/note= "Beta sheet region"
91..93
Binding-site
/note= "IL-1 receptor beta subunit binding region"
98..103
Region
/note= "Beta sheet region"
102
Binding-site
/note= "IL-1 receptor beta subunit binding region"
104..105
Binding-site
/note= "IL-1 receptor beta subunit binding region"
107..108
Binding-site
/note= "IL-1 receptor beta subunit binding region"
110..113
Region
/note= "Beta sheet region"
119..123
Region
/note= "Beta sheet region"
125..126
Binding-site
/note= "IL-1 receptor alpha subunit binding region"
128..130
Binding-site
/note= "IL-1 receptor alpha subunit binding region"
130..134
Region
/note= "Beta sheet region"
145..153
Region
/note= "Beta sheet region"
150
Binding-site
/note= "IL-1 receptor alpha subunit binding region"
152
Binding-site
/note= "IL-1 receptor alpha subunit binding region"

FT Binding-site 153
FT /note= "IL-1 receptor beta subunit binding region"
FT Binding-site 155
FT /note= "IL-1 receptor beta subunit binding region"
XX
PN WO200157219-A2.
XX
XX
PD 09-AUG-2001.
XX
XX
PF 01-FEB-2001; 2001WO-US03285.
XX
XX
PR 02-FEB-2000; 2000US-0179638.
XX
XX
PA (SCHE) SCHERING CORP.
XX
XX
PI Debets JEMA, Timans JC, Bazan JF, Kastelein RA;
XX
XX
DR WPI: 2001-488886/53.
DR N-PSDB; AAD12295.
XX
XX
Novel isolated or recombinant antigenic interleukin-1 delta or epsilon polypeptide useful for treating conditions exhibiting abnormal expression of interleukin such as immunological disorders, tumor and allergy
PT
PT
PT
PT
XX
PS Claim 18; Fig 1; 103pp; English.
XX
XX
CC The invention relates to recombinant antigenic interleukin-1 like molecules and their corresponding nucleic acid sequences, designated as interleukin-1delta (IL-1delta) and interleukin-1epsilon (IL-1epsilon). IL-1delta and IL-1epsilon are useful for treating conditions exhibiting abnormal expression of the interleukin such as immunological disorders, tumors, inflammatory diseases, fever, hypoglycaemia, psoriasis, allergy, autoimmune diseases and infectious diseases (e.g., pulmonary tuberculosis, leprosy, fulminant hepatitis, and viral infections such as HIV). The invention also relates to methods of using the composition containing IL-1delta or IL-1epsilon for both diagnostic and therapeutic utilities. IL-1delta is used as an immunogen for the production of antisera or antibodies specific, e.g., capable of distinguishing between IL-1 family members and an IL-1delta, for the interleukin or its fragment. The purified interleukin is used as a reagent to detect any antibodies generated in response to the presence of elevated levels of expression, or immunological disorders which lead to antibody production to the endogenous cytokine. The invention also contemplates the use of competitive drug screening assays. The present sequence is human interleukin-1delta (IL-1delta) protein.
XX
XX
SQ Sequence 155 AA;

Query Match 89.6%; Score 734; DB 22; Length 155;
Best Local Similarity 91.0%; Pred. No. 2.1e-77;
Matches 141; Conservative 4; Mismatches 10; Indels 0; Gaps 0;

Qy 2 MVLGALCFRMKDSALKVLYLHNNQLLAGLHAEKVIKGEISVVPNRALDASLSPVILG 61
Db 1 MVLGALCFRMKDSALKVLYLHNNQLLAGLHAEKVIKGEISVVPNRALDASLSPVILG 60
Qy 62 VQGSQCLSCGTEKGPILKLEPVNIMELYLGAKESKSFYRRDMLTSSFSFAAYPGWF 121
Db 61 VQGSQCLSCGTEKGPILKLEPVNIMELYLGAKESKSFYRRDMLTSSFSFAAYPGWF 120
Qy 122 LCTSEADQPVRILTQIPEDPAWDADPITDFYQOCD 156
Db 121 LCTVPEADQPVRILTQIPEDPAWDADPITDFYQOCD 155

RESULT 15
AAB87601
ID AAB87601 standard; Protein; 155 AA.
XX
AC AAB87601;
XX

Job time: 210 sec

DT 15-MAY-2001 (first entry)
XX DE Human PRO4342.
XX KW Human; PRO protein; mapping.
XX OS Homo sapiens.
XX PN WO200116318-A2.
XX PD 08-MAR-2001.
XX PF 24-AUG-2000; 2000WO-US23328.
XX PR 01-SEP-1999; 99WO-US20111.
PR 15-SEP-1999; 99WO-US21090.
PR 07-DEC-1999; 99US-0169495.
PR 09-DEC-1999; 99US-0170262.
PR 11-JAN-2000; 2000US-0175481.
PR 18-FEB-2000; 2000WO-US04341.
PR 18-FEB-2000; 2000WO-US04342.
PR 22-FEB-2000; 2000WO-US04114.
PR 01-MAR-2000; 2000WO-US05601.
PR 03-MAR-2000; 2000US-0187202.
PR 25-APR-2000; 2000US-0199397.
PR 22-MAY-2000; 2000WO-US14042.
PR 05-JUN-2000; 2000US-0209832.
XX PA (GETH) GENENTECH INC.
XX PI Eaton DL, Filvaroff E, Gerritsen ME, Goddard A, Godowski PJ;
PI Grimaldi CJ, Gurney AL, Watanabe CK, Wood WI;
XX DR WPI: 2001-183260/18.
DR N-PSDB; AAF92133.
XX PT Eighty four nucleic acids encoding PRO polypeptides, useful in
PT molecular biology, including use as hybridization probes, and in
PT chromosome and gene mapping.
XX PS Claim 12; Fig 152; 278pp; English.
XX CC The present sequence is a human PRO polypeptide (secreted and
transmembrane). The PRO protein, and PRO agonists, PRO antagonists or
anti-PRO antibodies are useful for preparation of a medicament useful in
the treatment of a condition which is responsive to the PRO protein,
agonists, antagonists or anti-PRO antibodies. The PRO protein may also be
employed as molecular weight markers for protein electrophoresis. The PRO
coding sequence has applications in molecular biology, including use as
hybridisation probes, and in chromosome and gene mapping.
XX SQ Sequence 155 AA;
Query Match 89.6%; Score 734; DB 22; Length 155;
Best Local Similarity 91.0%; Pred. No. 2.1e-77;
Matches 141; Conservative 4; Mismatches 10; Indels 0; Gaps 0;
QY 2 MYLSGALCFRMDKSAKLYLHNNQLLAGLHAEKIKGEISVVPNRALDASLSPVILG 61
Db 1 mvlsgalcfrmkdsalkvlylhnnqlagglhagkvikgeisvvpnrwldaslspsvilg 60
QY 62 VQGSQCISCGTEKGPILKLEPVMIMELYLGAKESKSFYFRDMGLTSSFESAAYPGWF 121
Db 61 vqgsqciscvgqgdeptltlepvnimelylgakesksftfyrddngitssfesaaaypgwf 120
QY 122 LCTSPADQPVRLTQIPEDPAWDAPITDFYFOQCD 156
Db 121 lctvpeadqpvrltqlpenggwnapitdfyfqqcd 155


```

Query Match      48.0%; Score 393; DB 4; Length 80;
Best Local Similarity 90.0%; Pred. No. 1e-42;
Matches 72; Conservative 3; Mismatches 5; Indels 0; Gaps 0;

QY 77 PILKLEPVNIMELYLGAKESKSFYRRDMGLTSSFSAAYPGWFCLCTSEADOPVRLTQ 136
  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
  1 PTTLEPVNIMELYLGAKESKSFYRRDMGLTSSFSAAYPGWFLCTVPEADOPVRLTQ 60

QY 137 IPEDPAWDAPITDFYFQQCD 156
  : | | : | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 61 LPENGWNAPITDFYFQQCD 80

RESULT 6
US-09-417-455-9
; Sequence 9, Application US/09417455
; Patent No. 6294655
; GENERAL INFORMATION:
; APPLICANT: Ford, John
; APPLICANT: Pace, Ann
; TITLE OF INVENTION: A NOVEL INTERLEUKIN-1 RECEPTOR ANTAGONIST AND USES THEREOF
; FILE REFERENCE: 28110/36328
; CURRENT APPLICATION NUMBER: US/09/417,455
; CURRENT FILING DATE: 1999-10-13
; PRIOR APPLICATION NUMBER: US 09/348,942
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: PCT/US99/04291
; PRIOR FILING DATE: 1999-04-05
; PRIOR APPLICATION NUMBER: US 09/287,210
; PRIOR FILING DATE: 1999-04-05
; PRIOR APPLICATION NUMBER: US 09/251,370

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[illegible]

RESULT 10

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RESOLU      IO
US-09-316-081-2
; Sequence 2, Application US/09316081
; Patent No. 6339141
; GENERAL INFORMATION:
; APPLICANT: Ballinger, Dennis G.
; APPLICANT: Pace, Ann M.
; TITLE OF INVENTION: Interleukin-1 Hy2 Materials and Methods
; FILE REFERENCE: 28110/33659
; CURRENT APPLICATION NUMBER: US/09/316,081
; CURRENT FILING DATE: 1999-05-20
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 152
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-316-081-2

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GenCore version 4.5
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Run on: May 22, 2002, 14:08:13 ; Search time 16.28 seconds
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Title: US-09-770-528-2
Perfect score: 819
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Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283138 seqs, 96089334 residues
tal number of hits satisfying chosen parameters: 283138

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR_71: *
1: pir1: *
2: pir2: *
3: pir3: *
4: pir4: *

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	734	89.6	155	JC7104	interleukin-1 rece
2	319.5	39.0	178	A44610	interleukin-1 rece
3	307.5	37.5	177	A30368	interleukin-1 rece
4	307.5	37.5	180	A39386	interleukin-1 rece
5	297.5	36.3	178	C40956	interleukin-1 rece
6	289.5	35.3	177	A54377	interleukin-1 rece
7	137.5	16.8	266	S23010	interleukin-1 beta
8	134.5	16.4	266	IC801B	interleukin-1 beta
9	129	15.8	267	JN0724	interleukin-1 beta
10	128.5	15.7	214	JC5646	interleukin-1 beta
11	128	15.6	269	I55969	interleukin-1 beta
12	127	15.5	267	S38373	interleukin-1 beta
13	122	14.9	269	IC8U1B	interleukin-1 beta
14	119	14.5	268	A30584	interleukin-1 beta
15	84	10.3	259	F95843	conserved hypother
16	84	10.3	1427	I51669	tumor suppressor -
17	84	10.3	1447	A54100	tumor suppressor p
18	80	9.8	364	T05401	hypothetical prote
19	80	9.8	437	I40176	ATP sulphyrase -
20	78	9.5	344	A41357	Fc gamma (IgG) rec
21	78	9.5	374	A139878	Fc gamma (IgG) rec
22	76.5	9.3	551	H81552	methionyl-tRNA syn
23	76.5	9.3	551	C86506	methionyl-tRNA syn
24	75.5	9.2	264	A75354	hypothetical prote
25	75.5	9.2	1034	S35758	mgli protein - mou
26	75.5	9.2	1116	T42213	m-tomoxyn, isoform
27	74	9.0	982	T19526	hypothetical prote
28	73.5	9.0	551	H72117	methionine-tRNA l
29	73	8.9	310	T33497	hypothetical prote

30	73	8.9	632	2	T45471	dnaK-type molecula
31	72.5	8.9	815	2	T36671	probable helicase
32	72.5	8.9	1272	2	S26180	neurofascin - chic
33	72	8.8	911	2	T01353	probable serine/th
34	71.5	8.7	204	2	G97071	folate-dependent p
35	71.5	8.7	282	2	AF0902	dihydropterolate sy
36	71.5	8.7	498	2	A87374	hypothetical prote
37	71.5	8.7	621	2	D96554	hypothetical prote
38	71	8.7	268	1	IC801A	interleukin-1 alph
39	71	8.7	268	1	A61246	interleukin-1 alph
40	71	8.7	333	2	AH2179	DnaJ protein (limpo
41	71	8.7	640	2	S37394	dnaK-type molecula
42	70.5	8.6	550	2	G70597	probable proteinas
43	70.5	8.6	608	2	T05741	dnaK-type molecula
44	70.5	8.6	663	2	T03581	dnaK-type molecula
45	70.5	8.6	663	2	T04080	dnaK-type molecula

ALIGNMENTS

RESULT 1
JC7104
interleukin-1 receptor antagonist - human
C:Species: Homo sapiens (man)
C:Date: 03-Dec-1999 #sequence_revision 03-Dec-1999 #text_change 21-Jul-2000
C:Accession: JC7104
R:Mulero, J.J.; Pace, A.M.; Nelken, S.T.; Loeb, D.B.; Correa, T.R.; Drmanac, R.; Ford
Biochem. Biophys. Res. Commun. 263, 702-706, 1999
A:Title: IL1H1: A novel interleukin-1 receptor antagonist gene.
A:Reference number: JC7104; MUID:99443727
A:Accession: JC7104
A:Molecule type: mRNA
A:Residues: 1-155 <MUL>
A:Cross-references: GB:AF186094; NID:g6049804; PIDN:AAF02757.1; PID:g6049805
C:Genetics:
A:Gene: il1h1
A:Map position: 2q14
C:Keywords: macrophage

Query Match 89.6%; Score 734; DB 2; Length 155;
Best Local Similarity 91.0%; Pred. No. 1.3e-66;
Matches 141; Conservative 4; Mismatches 10; Indels 0; Gaps 0;
QY 2 MVLSSGALCFRKMDSALKVLYLHNNQLLAGLHAETKGEISVVPNRALDASLSPVILG 61
|||||
Db 1 MVLSSGALCFRKMDSALKVLYLHNNQLLAGLHAGKGVKGEISVVPNRWLDASLSPVILG 60
QY 62 VQGSQCLSCGTEKGPILKLEPVNIMELYLGAKESKFTFYRRDMGLTSSFESAAYPGWF 121
|||||
Db 61 VQGSQCLSCGCGVGPPTLTLEPVNIMELYLGAKESKFTFYRRDMGLTSSFESAAYPGWF 120
QY 122 LCTSPDADQPVRLTQIPEDPAWDAPITDFYFQQCD 156
|||||
Db 121 LCTVPEADQPVRLTQIPEDPAWDAPITDFYFQQCD 155

RESULT 2
A44610
interleukin-1 receptor antagonist precursor - mouse
N:Alternate names: IL-1ra
C:Species: Mus musculus (house mouse)
C:Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change 16-Jul-1999
C:Accession: A44610; B40956; A49031; I56106; I52970
R:Natsushime, H.; Roussel, M.F.; Matsushima, K.; Hishinuma, A.; Sherr, C.J.
Blood 78, 616-623, 1991
A:Title: Cloning and expression of murine interleukin-1 receptor antagonist in macroph
A:Reference number: A44610; MUID:91316273
A:Accession: A44610
A:Molecule type: mRNA
A:Residues: 1-178 <MAY>
A:Cross-references: GB:M64404; NID:gl98296; PIDN:AAA39277.1; PID:gl98297

Db 149 AMEADQPVSLTNMPDE---GVNVTKFYFQE 175

RESULT 4

A39386

Interleukin-1 receptor antagonist, long intracellular splice form - human

N:Contains: interleukin-1 receptor antagonist, short intracellular splice form

C:Species: Homo sapiens (man)

C:Date: 28-Feb-1992 #sequence_revision 11-Apr-1997 #text_change 26-May-2000

C:Accession: J37893; A39386

R:Muzio, M.; Polentarutti, N.; Sironi, M.; Poli, G.; De Gioia, L.; Introna, M.; Mantovani, J. Exp. Med. 182, 623-628, 1995

A:Title: Cloning and characterization of a new isoform of the interleukin 1 receptor and

A:Reference number: 137893; MUID:95353865

A:Accession: J37893

A:Status: translated from GB/EMBL/DBJ

A:Molecule type: mRNA

A:Residues: 1-180 <RES>

A:Cross-references: EMBL:X84348; NID:g1008970; PIDN:CAA59087.1; PID:g1008971

Haskill, S.; Martin, G.; Van Lee, L.; Morris, J.; Peace, A.; Bigler, C.F.; Jaffe, G.J.; Soc. Natl. Acad. Sci. U.S.A. 88, 3681-3685, 1991

A:Title: cDNA cloning of an intracellular form of the human interleukin 1 receptor antag

A:Reference number: A39386; MUID:91219436

A:Accession: A39386

A:Molecule type: mRNA

A:Residues: 1-3,25-180 <HAS>

A:Cross-references: GB:M55646; NID:g186291; PIDN:AAA59138.1; PID:g186292

C:Comment: For an alternative splice form, see PIR:A30368

C:Genetics:

A:Gene: GDB:IL1RN

A:Cross-references: GDB:125897; OMIM:147679

A:Map position: 2q14.2-q14.2

C:Superfamily: Interleukin-1

C:Keywords: alternative splicing; cytokine receptor

F:1-180/Product: interleukin-1 receptor antagonist, long intracellular splice form #stat

F:1-3,25-180/Product: interleukin-1 receptor antagonist, short intracellular splice form

Query Match 37.5%; Score 307.5; DB 2; Length 180;

Best Local Similarity 48.0%; Pred. No. 1.5e-23;

Matches 72; Conservative 16; Mismatches 45; Indels 17; Gaps 5;

QY 10 FRMKDSALKVLYLHNNOLLAGLHAEKVKGEISVVPNRALDASLSP--VILGVQGSQ 67

Db 41 FRWDVNQKTFYLRNQLVAGYLOGPNVNLEEKIDVWP-----IEPHALFLGIHGK 93

QY 68 CLSC---GTEKGPILKLPVNMELYLGAKESKSFYVRDMGLTSSPESAAYPGWFLCT 124

94 CLSCVKSGDETR--LQLEAVNITDLSNKRQDKRFAFIRSDSGPTTSFESACPGWFLCT 151

QY 125 SPADQPVRLTQIPEDPAWDAPITDFYFQQ 154

Db 152 AMEADQPVSLTNMPDE---GVNVTKFYFQE 178

RESULT 5

C40956

Interleukin-1 receptor antagonist precursor - rat

C:Species: Rattus norvegicus (Norway rat)

C:Date: 20-Mar-1992 #sequence_revision 20-Mar-1992 #text_change 16-Jul-1999

C:Accession: C40956

R:Eisenberg, S.P.; Brewer, M.T.; Verderber, E.; Heimdal, P.; Brandhuber, B.J.; Thompson, Proc. Natl. Acad. Sci. U.S.A. 88, 5232-5236, 1991

A:Title: Interleukin 1 receptor antagonist is a member of the interleukin 1 gene family:

A:Reference number: A40956; MUID:91271363

A:Accession: C40956

A:Status: preliminary

A:Molecule type: DNA

A:Residues: 1-178 <EIS>

A:Cross-references: GB:M63101; NID:g204928; PIDN:AAA41434.1; PID:g204929

C:Superfamily: Interleukin-1

C:Keywords: cytokine receptor

Query Match 36.3%; Score 297.5; DB 2; Length 178;

Best Local Similarity 46.3%; Pred. No. 1.5e-22;

Matches 68; Conservative 17; Mismatches 51; Indels 11; Gaps 4;

QY 10 FRMKDSALKVLYLHNNOLLAGLHAEKVKGEISVVPNRALDASLSPVILGVQGSQCL 69

Db 39 FRWDVNQKTFYLRNQLVAGYLOGPNVNLEEKIDVWP-----IDPRNVFLGIHGK 93

QY 70 SGTGKGG--PILKLPVNMELYLGAKESKSFYVRDMGLTSSPESAAYPGWFLCTSP 127

Db 94 SC-VKSGDDTKLQLEAVNITDLSNKRQDKRFAFIRSDSGPTTSFESLACPGWFLCT 152

QY 128 ADQPVRLTQIPEDPAWDAPITDFYFQQ 154

Db 153 ADHPVSLTNTPKEP---CTVTKFYFQE 176

RESULT 6

A54377

Interleukin-1 receptor antagonist secreted form precursor - rabbit

C:Species: Oryctolagus cuniculus (domestic rabbit)

C:Date: 06-Oct-1994 #sequence_revision 18-Nov-1994 #text_change 16-Jul-1999

C:Accession: A54377; I46729

R:Cominelli, F.; Bortolami, M.; Pizarro, T.T.; Monsacchi, L.; Ferretti, M.; Brewer, M. J. Biol. Chem. 269, 6962-6971, 1994

A:Title: Rabbit interleukin-1 receptor antagonist. Cloning, expression, functional ch

A:Reference number: A54377; MUID:94165101

A:Accession: A54377

A:Molecule type: mRNA

A:Residues: 1-177 <COM>

A:Cross-references: GB:S68977; NID:g545740; PIDN:AAB30093.1; PID:g545741

A:Experimental source: colon tissue

A>Note: sequence extracted from NCBI backbone (NCBIN:144168, NCBI:P:144169)

R:Goto, F.; Goto, K.; Miyata, T.; Ohkawara, S.; Takao, T.; Mori, S.; Furukawa, S.; Ma Immunology 77, 235-244, 1992

A:Title: Interleukin-1 receptor antagonist in inflammatory exudate cells of rabbits. P

A:Reference number: I46729; MUID:93052512

A:Accession: I46729

A:Status: translated from GB/EMBL/DBJ

A:Molecule type: mRNA

A:Residues: 1-177 <GOT>

A:Cross-references: GB:D21832; NID:g425787; PIDN:BAA04860.1; PID:g452205

C:Superfamily: Interleukin-1

C:Keywords: cytokine receptor; extracellular protein; glycoprotein

F:1-25/Domain: signal sequence #status predicted <SIG>

F:109/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 35.3%; Score 289.5; DB 2; Length 177;

Best Local Similarity 46.3%; Pred. No. 9.7e-22;

Matches 69; Conservative 17; Mismatches 48; Indels 15; Gaps 5;

QY 10 FRMKDSALKVLYLHNNOLLAGLHAEKVKGEISVVPNRALDASLSP--VILGVQGSQ 67

Db 38 FRWDVNQKTFYLRNQLVAGYLOGPNNAKLERIDVWP-----LEPOLFLGIHQGL 90

QY 68 CLSCGTEKGPILK--LEPVNIMELYLGAKESKSFYVRDMGLTSSPESAAYPGWFLCTS 125

Db 91 CLSC-VKSGDKMLHLEAVNITDLSNKRQDKRFFIRNSGPTTSFESACPGWFLCTA 149

QY 126 PEADQPVRLTQIPEDPAWDAPITDFYFQQ 154

Db 150 LEADQPVSLTNTPDD---SIVVTKFYFQE 175

RESULT 7

S23010

Interleukin-1 beta precursor - sheep

N:Alternate names: hematoopoietin-1; IL-1 beta

C:Species: Ovis orientalis aries, Ovis ammon aries (domestic sheep)

C:Date: 08-Jun-1994 #sequence_revision 22-Nov-1996 #text_change 15-Oct-1999

C:Accession: S23010; S43047; S13092; B61246

A; Molecule

A; Molecule

A:Title: Rabbit IL-1. Cloning, expression, biologic properties, and transcription during
A:Reference number: A30584; MUID:891176242
A:Accession: A30584
A:Molecule type: mRNA
A:Residues: 1-268 <CAN>
A:Cross-references: GB:M26295; NID:g516632; PIDN:AAA31373.1; PID:g516633.
R:Young, P.R.; Sylvester, D.
Protein Eng. 2, 545-551, 1989
A:Title: Cloning of rabbit interleukin-1 beta: differential evolution of IL-1 alpha and
A:Reference number: A94230; MUID:89315718
A:Accession: JU0082
A:Molecule type: mRNA
A:Residues: 1-268 <YOU>
C:Comment: This protein lacks a conventional signal sequence for protein export. Cleavage
ved form of interleukin-1beta, unlike interleukin 1-alpha, is inactive.
C:Comment: Interleukin-1beta precursor is less heavily myristoylated than interleukin-1a
C:Superfamily: Interleukin-1
C:Keywords: cytokine; immunoregulation; inflammation; lymphokine; macrophage; mitogen
F:117-268/Product: Interleukin-1 beta #status predicted <ILB>

Query Match 14.5%; Score 119; DB 1; Length 268;
Best Local Similarity 30.6%; Pred. NO. 0.00025;
Matches 41; Conservative 20; Mismatches 55; Indels 18; Gaps 4;

QY 2 MVLSSGALCFRMKDSALAVLYLHNNQLLAGLHAEKVIKGEISVVPNRALDASLSPVILG 61
DB 133 LVLSGT- - - - - ELKALHNAENLNQVVFMSFVQGESE- - - - - DKIRVALG 176
QY 62 VOGSGCGLSC-GTEKGPILKLEPNIMELYLGAKESKSFYRRDMGLTSSFFESAAYPGW 120
DB 177 LRGNLYLSCVMKDDKPTLQLESVD-PNRYPKKMKERFVFNKIEIKDKLEFESAQFPNW 235
QY 121 FLCTSPADQPVRL 134
DB 236 YISTQTEYMPVFL 249

RESULT 15
F95843
Conserved hypothetical protein SMB20011 [Imported] - Sinorhizobium meliloti (strain 1021
C:Species: Sinorhizobium meliloti
C:Date: 24-Aug-2001 #sequence_revision 24-Aug-2001 #text_change 30-Sep-2001
C:Accession: F95843
R:Finan, T.M.; Weidner, S.; Wong, K.; Buhrmester, J.; Chain, P.; Vorholter, F.J.; Hernan
Proc. Natl. Acad. Sci. U.S.A. 98, 9889-9894, 2001
A:Title: The complete sequence of the 1,683-kb pSymb megaplasmid from the N2-fixing endo
Reference number: A95842; MUID:21396508; PMID:11481431
Accession: F95843
Status: preliminary
A:Molecule type: DNA
A:Residues: 1-259 <KUR>
A:Cross-references: GB:AL591985; PIDN:CAC48414.1; PID:g15139886; GSPDB:GN00167
A:Experimental source: strain 1021, megaplasmid pSymb
R:Galibert, F.; Finan, T.M.; Long, S.R.; Puhler, A.; Abola, P.; Ampe, F.; Barloy-Hubler,
pela, D.; Chain, P.; Cowie, A.; Davis, R.W.; Dreano, S.; Federspiel, N.A.; Fisher, R.F.;
L.; Hyman, R.W.; Jones, T.
Science 293, 668-672, 2001
A:Authors: Kahn, D.; Kahn, M.L.; Kalman, S.; Keating, D.H.; Kiss, E.; Komp, C.; Lelaure,
hebaule, P.; Vandenbol, M.; Vorholter, F.J.; Weidner, S.; Wells, D.H.; Wong, K.; Yeh, K.
A:Title: The composite genome of the legume symbiont Sinorhizobium meliloti.
A:Reference number: A96039; MUID:21368234; PMID:11474104
A:Contents: annotation
C:Genetics:
A:Gene: SMB20011
A:Genome: plasmid

Query Match 10.3%; Score 84; DB 2; Length 259;
Best Local Similarity 27.2%; Pred. NO. 0.8;
Matches 41; Conservative 18; Mismatches 46; Indels 46; Gaps 7;

QY 14 DSALKVLYLH- - - - - NNQLLAGLHAEKVIKGEISVVPNRALDASLSPVILGVQGG 65

Db 97 DQKAEVDRLHRRRRPRGSSNVAVLAGTSAELIEGTICV- - - - -GATFEPEVALIVGL 150
QY 66 SQCLSCGTEKGPILKLEPNIMELYLGAKESKSFYRRDMGLTS- - - - -SFESAAYPGWF 121
Db 151 AICIDNFS- - - - -EGMSIGELTLDEERKNA- - - - -KRRTLGWTLTGLSLFVSAVAGWF 199
QY 122 LCTSPADQPVRLTIQIPEDPAWDAPITDYF 152
Db 200 LLKG- - - - -LAQ- - - - -PVTGFLF 213

Search completed: May 22, 2002, 14:11:40
Job time: 207 sec

GenCore version 4.5
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OM protein - protein search, using sw model

Run on: May 22, 2002, 14:09:23 ; Search time 11.89 seconds
(without alignments)
508.011 Million cell updates/sec

Title: US-09-770-528-2
Perfect score: 819
Sequence: 1 MMVSLGALCFRKMKSALKVL.....IPEDPAWDAPITDFYFQQCD 156

Scoring table:
BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 105224 seqs, 38719550 residues
tal number of hits satisfying chosen parameters: 105224

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : SwissProt_40:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB ID	Description
1	319.5	39.0	178	1 IL1X_MOUSE	P25085 mus musculus
2	307.5	37.5	177	1 IL1X_HUMAN	P18510 homo sapien
3	301.5	36.8	174	1 IL1X_BOVIN	O77482 bos taurus
4	299.5	36.6	177	1 IL1X_PIG	Q29056 sus scrofa
5	287.5	36.3	178	1 IL1X_RAT	P25086 rattus norv
6	289.5	35.3	177	1 IL1X_RABIT	P26890 oryctolagus
7	269.5	32.9	177	1 IL1X_HORSE	O18999 equus cabal
8	137.5	16.8	266	1 IL1B_SHEEP	P21621 ovis aries
9	137.5	16.7	268	1 IL1B_HORSE	Q28386 equus cabal
10	136.5	16.7	266	1 IL1B_CEREL	P51745 cervus elap
11	134.5	16.4	266	1 IL1B_BOVIN	P09428 bos taurus
12	131.5	16.1	266	1 IL1B_CAVPO	Q9wvg1 cavia porce
13	129.5	15.8	267	1 IL1B_PIG	P26889 sus scrofa
14	128.5	15.6	269	1 IL1B_MOUSE	P10749 mus musculus
15	126.5	15.4	269	1 IL1B_TRIVU	Q9xs77 trichosurus
16	126.5	15.4	269	1 IL1B_MACMU	P48090 macaca mula
17	125.5	15.3	267	1 IL1B_FELCA	P41687 felis silve
18	125.5	15.3	268	1 IL1B_MACFA	P79182 macaca fasc
19	125.5	15.3	268	1 IL1B_RAT	Q63264 rattus norv
20	124.5	15.2	266	1 IL1B_CAPHI	P79162 capra hircu
21	123.5	15.0	269	1 IL1B_MACNE	P51493 macaca neme
22	122.5	14.9	269	1 IL1B_HUMAN	P01584 homo sapien
23	119.5	14.5	268	1 IL1B_RABIT	P14628 oryctolagus
24	115.5	14.0	269	1 IL1B_CERTO	P46648 cercocebus
25	84.0	10.3	1447	1 IL1B_HUMAN	P43146 homo sapien
26	84.0	10.3	1447	1 DCC_MOUSE	P70211 mus musculus
27	80.5	9.8	437	1 SAT_RIFPS	Q54506 rifia pach
28	78.5	9.5	374	1 FCGL_HUMAN	P12314 homo sapien
29	77.5	9.4	271	1 IL1A_HUMAN	P79340 macaca fasc
30	77.5	9.4	271	1 IL1A_MACMU	P48089 macaca mula
31	76.5	9.3	551	1 SYM_CHLPN	Q9z959 chlamydia p
32	72.5	8.9	268	1 IL1A_CAPHI	P79161 capra hircu
33	72.5	8.8	268	1 IL1A_SHEEP	Q28579 ovis aries

RESULT 1
IL1X_MOUSE

ID IL1X_MOUSE STANDARD; PRT; 178 AA.
AC P25085; 070207;
DT 01-MAY-1992 (Rel. 22, Created)
DT 01-MAY-1992 (Rel. 22, Last sequence update)
DT 01-MAR-2002 (Rel. 41, Last annotation update)
DE Interleukin-1 receptor antagonist protein precursor (IL-1RA) (IL-1RN)
DE (IRAP).
GN IL1RN OR IL-1RA.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Cranialata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A. (ISOFORM 1).
RX MEDLINE=91250712; PubMed=1828262;
RA Zahedi K., Seldin M.F., Rits M., Ezekowitz R.A., Whitehead A.S.;
RT "Mouse IL-1 receptor antagonist protein. Molecular characterization,
RT gene mapping, and expression of mRNA in vitro and in vivo.";
RL J. Immunol. 146:4228-4233(1991).
RN [2]
RP SEQUENCE FROM N.A. (ISOFORM 1).
RX MEDLINE=91316273; PubMed=1830498;
RA Matsushime H., Roussei M.F., Matsushima K., Hishinuma A., Sherr C.J.;
RT "Cloning and expression of murine interleukin-1 receptor antagonist
RT in macrophages stimulated by colony-stimulating factor 1.";
RL Blood 78:616-623(1991).
RN [3]
RP SEQUENCE FROM N.A. (ISOFORM 1).
RX STRAIN-SWISS;
RX MEDLINE=94271931; PubMed=8003626;
RA Zahedi K.A., Uhlar C.M., Rits M., Prada A.E., Whitehead A.S.;
RT "The mouse interleukin 1 receptor antagonist protein: gene structure
RT and regulation in vitro.";
RL Cytokine 6:1-9(1994).
RN [4]
RP SEQUENCE FROM N.A. (ISOFORM 2).
RX STRAIN-FVBXDBA/1 LACJ;
RX MEDLINE=98209757; PubMed=9550387;
RA Gabay C., Porter B., Fantuzzi G., Arend W.P.;
RT "Mouse IL-1 receptor antagonist isoforms: complementary DNA cloning
RT and protein expression of intracellular isoform and tissue
RT distribution of secreted and intracellular IL-1 receptor antagonist in
RT vivo.";
RL J. Immunol. 159:5905-5913(1997).
RN [5]
RP SEQUENCE OF 7-178 FROM N.A.
RX MEDLINE=91271363; PubMed=1828896;
RA Eisenberg S.P., Brewer M.T., Verderber E., Helmdal P.,
RA Brandhuber B.J., Thompson R.C.;
RT "Interleukin 1 receptor antagonist is a member of the interleukin 1
RT gene family: evolution of a cytokine control mechanism.";
RL Proc. Natl. Acad. Sci. U.S.A. 88:5232-5236(1991).
RN [6]
RP SEQUENCE OF 23-178 FROM N.A.

P08831 bos taurus
P54223 rhizobium m
P36415 dictyostell
O24581 zea mays (m
P33981 homo sapien
P03103 bovine papl
O83195 treponema p
P18430 sus scrofa
Q64725 rattus norv
P24067 zea mays (m
P28950 equine herp
P01582 mus musculu

ALIGNMENTS

RL Nature 343:336-340(1990).
 RN [9]
 RP SEQUENCE OF 26-52.
 RX MEDLINE=9035444; PubMed=2143761;
 RA Bienkowski M.J., Eessalu T.E., Berger A.E., Truesdell S.E.,
 RA Shelly J.A., Laborde A.L., Zurcher-Neely H.A., Reardon I.M.,
 RA Heinrikson R.L., Chosay J.G., Tracey D.E.;
 RT "Purification and characterization of interleukin 1 receptor level
 RT antagonist proteins from THP-1 cells.";
 RL J. Biol. Chem. 265:14505-14511(1990).
 RN [10]
 RP SEQUENCE OF 35-177 FROM N.A. (ISOFORM 4).
 RX MEDLINE=98183404; PubMed=9514884; Champlaud M.F., Towle C.A.;
 RA Weissbach L., Tran K., Colquhoun S.A., Chamlipaud M.F., Towle C.A.;
 RT "Detection of an interleukin-1 intracellular receptor antagonist mRNA
 RT variant.";
 RL Biochem. Biophys. Res. Commun. 244:91-95(1998).
 RN [11]
 RP STRUCTURE BY NMR.
 RX MEDLINE=92297633; PubMed=1534997;
 RA Stockman B.J., Scallill T.A., Roy M., Ulrich E.L., Strakalaitis N.A.,
 RA Brunner D.P., Yem A.W., Deibel M.R. Jr.;
 RT "Secondary structure and topology of interleukin-1 receptor
 RT antagonist protein determined by heteronuclear three-dimensional NMR
 RT spectroscopy.";
 RL Biochemistry 31:5237-5244(1992).
 RN [12]
 RP STRUCTURE BY NMR.
 RX MEDLINE=94320651; PubMed=8045306;
 RA Stockman B.J., Scallill T.A., Strakalaitis N.A., Brunner D.P.,
 RA Yem A.W., Deibel M.R. Jr.;
 RT "Solution structure of human interleukin-1 receptor antagonist
 RT protein.";
 RL FEBS Lett. 349:79-83(1994).
 RN [13]
 RP X-RAY CRYSTALLOGRAPHY (2.0 ANGSTROMS).
 RX MEDLINE=94230368; PubMed=8175703;
 RA Vigers G.P.A., Caffes P., Evans R.J., Thompson R.C., Eisenberg S.P.,
 RA Brandhuber B.J.;
 RT "X-ray structure of Interleukin-1 receptor antagonist at 2.0-A
 RT resolution.";
 RL J. Biol. Chem. 269:12874-12879(1994).
 RN [14]
 RP X-RAY CRYSTALLOGRAPHY (2.1 ANGSTROMS).
 RX MEDLINE=95172072; PubMed=7867645;
 RA Schreuder H.A., Rondau J.-M., Tardif C., Soffientini A., Sarubbi E.,
 RA Akesson A., Bowlin T.L., Yanofsky S., Barrett R.W.;
 RT "Refined crystal structure of the interleukin-1 receptor antagonist.
 RT Presence of a disulfide link and a cis-proline.";
 RL Eur. J. Biochem. 227:838-847(1995).
 RN [15]
 RP X-RAY CRYSTALLOGRAPHY (2.7 ANGSTROMS) OF 32-177 IN COMPLEX WITH IL1R.
 RX MEDLINE=97215904; PubMed=9062194;
 RA Schreuder H., Tardif C., Trump-Kallmeyer S., Soffientini A.,
 RA Sarubbi E., Akesson A., Bowlin T., Yanofsky S., Barrett R.W.;
 RT "A new cytokine-receptor binding mode revealed by the crystal
 RT structure of the IL-1 receptor with an antagonist.";
 RL Nature 386:194-200(1997).
 CC -1- FUNCTION: IL-1RA INHIBITS THE ACTIVITY OF IL-1 BY BINDING TO ITS
 CC RECEPTOR. IL-1RA HAS NO IL-1 LIKE ACTIVITY.
 CC -1- SUBCELLULAR LOCATION: SECRETED (ISOFORM 1) OR INTRACELLULAR
 CC (ISOFORMS 2, 3 AND 4).
 CC -1- ALTERNATIVE PRODUCTS: 4 isoforms; 1 (shown here), 2/icIL-1ra,
 CC 3/icIL-1ra type II and 4; are produced by alternative splicing.
 CC TISSUE SPECIFICITY: THE INTRACELLULAR FORM OF IL-1RA IS
 CC PREDOMINANTLY EXPRESSED IN EPITHELIAL CELLS.
 CC -1- SIMILARITY: BELONGS TO THE IL-1 FAMILY.
 CC -1- DATABASE: NAME=RD Systems' cytokine source book: IL1RN;
 CC WWW="http://www.rndsystems.com/asp/g_sitebuilder.asp?bodyId=205".
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 CC or send an email to license@isb-sib.ch).
 CC -----
 DR EMBL; M55646; AAA59138.1; -
 DR EMBL; M63099; AAB41943.1; -
 DR EMBL; X52015; CAA36262.1; -
 DR EMBL; X53296; CAA37386.1; -
 DR EMBL; X64532; CAA45832.1; -
 DR EMBL; U65590; AAB92268.1; -
 DR EMBL; U65590; AAB92270.1; -
 DR EMBL; X84348; CAA59087.1; -
 DR EMBL; U65590; AAB92269.1; -
 DR EMBL; AF043143; AAC39672.1; -
 DR PIR; A30368; A30368.
 DR PIR; A37822; A37822.
 DR PIR; S08160; S08160.
 DR PIR; S08159; S08159.
 DR PIR; A40956; A40956.
 DR PIR; A39386; A39386.
 DR PDB; 1ITN; 30-APR-94.
 DR PDB; 2IRT; 15-OCT-94.
 DR PDB; 1LRP; 27-FEB-95.
 DR PDB; 1ILR; 07-FEB-95.
 DR PDB; 1ILT; 01-APR-95.
 DR PDB; 1IRA; 17-JUN-98.
 DR Aarhus/Ghent-2DPAGE; 7104; IEF.
 DR Aarhus/Ghent-2DPAGE; 7105; IEF.
 DR MIM; 147679; -
 DR InterPro; IPR000375; Interleukin_1.
 DR Pfam; PF00340; IL1; 1.
 DR PRINTS; PR00264; INTERLEUKIN.
 DR ProDom; PD002536; Interleukin_1; 1.
 DR SMART; SM00123; IL1; 1.
 DR PROSITE; PS00253; INTERLEUKIN_1; 1.
 KW Glycoprotein; Signal; Alternative splicing; 3D-structure.
 FT SIGNAL 1 25
 FT CHAIN 26 177 INTERLEUKIN-1 RECEPTOR ANTAGONIST
 FT PROTEIN.
 FT DISULFID 91 141 N-LINKED (GLCNAC...) (POTENTIAL).
 FT CARBOHYD 109 109 MEICGLRSLHITLLFLFHS -> MAL (IN
 FT VARSPLIC 1 21 ISOFORM 2).
 FT VARSPLIC 1 21 MEICGLRSLHITLLFLFHS -> MALADLYEGBGGGGG
 FT VARSPLIC 1 34 GEDNADSK (IN ISOFORM 3).
 FT VARSPLIC 1 34 MISSING (IN ISOFORM 4).
 SQ SEQUENCE 177 AA; 20055 MW; D1690776A7394057 CRC64;
 Query Match 37.5%; Score 307.5; DB 1; Length 177;
 Best Local Similarity 48.0%; Pred. No. 2.8e-24;
 Matches 72; Conservative 16; Mismatches 45; Indels 17; Gaps 5;
 QY 10 FMKDSALKVLYLHNQLLAGLHAEKVIKGEISVVPNRALDASLSP--VILGVQGSQ 67
 DB 38 FRIVDNQKTFYLRNQLVAGYLPNVNLEEKIDWP-----IEPHALFLGIHGKGM 90
 QY 68 CLSC---GTEKGPILKLEPVNIMELYLGAKESKSTFFYRDMGLTSSPESAAYPGWFLCT 124
 DB 91 CLSCVKSGDETR--LQLEAVNITDUSENRKQDKREFIRSDSGPTTSFESACPGWFLCT 148
 QY 125 SPEADQPVRLTQIPEDPAWDAPITDFYFQQ 154
 DB 149 AMEAQDPVSLTNMPDE--GVMTKTFYQE 175
 RESULT 3
 ID IL1X_BOVIN STANDARD; PRT; 174 AA.
 AC O77482;
 DT 15-DEC-1998 (Rel. 37, Created)
 DT 15-DEC-1998 (Rel. 37, Last sequence update)

RA Eisenberg S.P., Brewer M.T., Verderber E., Heimdal P.,
RA Brandhuber B.J., Thompson R.C.;
RA "Interleukin 1 receptor antagonist is a member of the interleukin 1
RT gene family: evolution of a cytokine control mechanism.";
RL Proc. Natl. Acad. Sci. U.S.A. 88:5232-5236(1991).
CC -!- FUNCTION: IL-1RA INHIBITS THE ACTIVITY OF IL-1 BY BINDING TO ITS
CC RECEPTOR. IL-1RA HAS NO IL-1 LIKE ACTIVITY.
CC -!- SIMILARITY: BELONGS TO THE IL-1 FAMILY.
CC -----
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CC -----
DR EMBL; M63101; AAA41434.1; -
DR PIR; C40956; C40956.
DR HSSP; P18510; IL1R.
DR InterPro; IPR000975; Interleukin_1.
DR Pfam; PF00340; IL1; 1.
DR PRINTS; PR00264; INTERLEUKIN1.
DR ProDom; PD002536; Interleukin_1; 1.
DR SMART; SM00125; IL1; 1.
DR PROSITE; PS00253; INTERLEUKIN_1; 1.
KW Glycoprotein; Signal.
FT SIGNAL 1 26
FT CHAIN 27 178
FT BY SIMILARITY.
FT INTERLEUKIN-1 RECEPTOR ANTAGONIST
FT PROTEIN.
FT BY SIMILARITY.
FT CARBOHYD 110 110 N-LINKED (GLCNAC...) (POTENTIAL).
SQ SEQUENCE 178 AA; 20282 MW; F3A5754FB6C51B03 CRC64;

Query Match 36.3%; Score 297.5; DB 1; Length 178;
Best Local Similarity 46.3%; Pred. No. 2.9e-23;
Matches 68; Conservative 17; Mismatches 51; Indels 11; Gaps 4;

QY 10 FRMKDSALKVLYLHNNQLLAGLHAEKVKGEEISVVPNRLDASLSPVILGVGGSGQL 69
DB 39 FRWDVNTQKTFYLRNQLAGYLGQPNKLEEKIDWVP-----IDFRNVFLGIHGKLC 93
QY 70 SCGTEKG--PILKEPVNIMLYLGAKESKFTFYRDMGLTSSFESAAYPGWFLCTSP 127
DB 94 SC-VKSGDDTKLQLEEVNITDLNKKEDKRTFIRSETGTTTSFESLACPGWFLCTTLE 152

QY 128 ADQPVRLTQIPEDPAWDAPITDFYFQ 154
DB 153 ADHPVSLTNTPEP---CTVTKFYFQE 176

RESULT 6
ID IL1X_RABIT STANDARD; PRT; 177 AA.
AC P26890;
DT 01-AUG-1992 (Rel. 23, Created)
DT 01-AUG-1992 (Rel. 23, Last sequence update)
DT 15-DEC-1998 (Rel. 37, Last annotation update)
DE Interleukin-1 receptor antagonist protein precursor (IL-1RA) (IL-1RN)
DE (IRAP).
GN IL1RN OR IL1RA.
OS Oryctolagus cuniculus (Rabbit).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
OX NCBI_TaxID=9986;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=94165101; PubMed=7509813;
RA Cominelli F., Bortolami M., Pizarro T.T., Monsacchi L., Ferretti M.,
RA Brewer M.T., Eisenberg S.P., Ng R.K.;
RT "Rabbit interleukin-1 receptor antagonist. Cloning, expression,
RT functional characterization, and regulation during intestinal

inflammation.";
J. Biol. Chem. 269:6962-6971(1994).
[2]
SEQUENCE FROM N.A.
RA Hamada H., Mulligan R.C.;
RA Submitted (XXX-1992) to the EMBL/GenBank/DBJ databases.
RN [3]
RP SEQUENCE FROM N.A.
RX MEDLINE=93052512; PubMed=1427977;
RA Coto F., Goto K., Miyata T., Ohkawa S., Takao T., Mori S.,
RA Furukawa S., Maeda T., Iwanaga S., Shimonishi Y., Yoshinaga M.;
RT "Interleukin-1 receptor antagonist in inflammatory exudate cells of
RT rabbits. Production, purification and determination of primary
RT structure.";
RL Immunology 77:235-244(1992).
CC -!- FUNCTION: IL-1RA INHIBITS THE ACTIVITY OF IL-1 BY BINDING TO ITS
CC RECEPTOR. IL-1RA HAS NO IL-1 LIKE ACTIVITY.
CC -!- SIMILARITY: BELONGS TO THE IL-1 FAMILY.
CC -----
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CC -----
DR EMBL; S68977; AAB30093.1; -
DR INTERLEUKIN_1; -
DR EMBL; M57526; AAA31374.1; -
DR EMBL; D21832; BAA04860.1; -
DR PIR; A54377; A54377.
DR HSSP; P18510; IL1R.
DR InterPro; IPR000975; Interleukin_1.
DR Pfam; PF00340; IL1; 1.
DR PRINTS; PR00264; INTERLEUKIN1.
DR ProDom; PD002536; Interleukin_1; 1.
DR SMART; SM00125; IL1; 1.
DR PROSITE; PS00253; INTERLEUKIN_1; 1.
KW Glycoprotein; Signal.
FT SIGNAL 1 25
FT CHAIN 26 177
FT BY SIMILARITY.
FT INTERLEUKIN-1 RECEPTOR ANTAGONIST
FT PROTEIN.
FT BY SIMILARITY.
FT CARBOHYD 109 109 N-LINKED (GLCNAC...) (POTENTIAL).
SQ SEQUENCE 177 AA; 20214 MW; F5BC087F097FEAF CRC64;

Query Match 35.3%; Score 289.5; DB 1; Length 177;
Best Local Similarity 46.3%; Pred. No. 1.9e-22;
Matches 69; Conservative 17; Mismatches 48; Indels 15; Gaps 5;

QY 10 FRMKDSALKVLYLHNNQLLAGLHAEKVKGEEISVVPNRLDASLSPVILGVGGSGQ 67
DB 38 FRWDVNTQKTFYLRNQLAGYLGQPNKLEERIDWVP-----LEPOLLFLGIORGKL 90
QY 68 CLSCGTEKGPILK--LEPVNIMLYLGAKESKFTFYRDMGLTSSFESAAYPGWFLCTS 125
DB 91 CLSC-VKSGDKMKHLLEAVNITDLGKNKEQDKRFTFIRNSGTTTTSFESASCPGWLCTA 149
QY 126 PEADQPVRLTQIPEDPAWDAPITDFYFQ 154
DB 150 LEADQPVSLTNTPEP---SIVTKFYFQE 175

RESULT 7
ID IL1X_HORSE STANDARD; PRT; 177 AA.
AC O18999; O77745;
DT 15-DEC-1998 (Rel. 37, Created)
DT 15-DEC-1998 (Rel. 37, Last sequence update)
DT 15-JUL-1999 (Rel. 38, Last annotation update)
DE Interleukin-1 receptor antagonist protein precursor (IL-1RA) (IL-1RN)
DE (IRAP).


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QY 17 LKVLVHNNQLAGLHAEKVIKGEISVVPNRDASLSPVILGVGGSCQLSCGTGK 76
DB 139 LKALHPQEMREYVFCMSFVQGEERD-----NKIPVALGIRKKNLYLSC-VKKG 188
QY 77 --PILKLEPVMIMELYLGAKESKFTFYRRDMGLTSSFESAAYPGWFLCSPDAPQVRL 134
DB 189 DTPILQLEVD-PKYVPKRNKEKRFVYKTKIKTVTFESVLYPNWYISTQIEKPVFL 247
QY 135 TOIPEDPAWDAPITDF 150
DB 248 GRF-----RGQDITDF 259

RESULT 9
IL1B_HORSE
ID IL1B_HORSE STANDARD; PRT; 268 AA.
AC Q28386; O77744; O18995;
DT 15-DEC-1998 (Rel. 37, Created)
DT 15-DEC-1998 (Rel. 37, Last sequence update)
DT 01-MAR-2002 (Rel. 41, Last annotation update)
DE Interleukin-1 beta precursor (IL-1 beta).
RN IL1B.
OS Equus caballus (Horse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Perissodactyla; Equidae; Equus.
OX NCBI_TaxID=9796;
RN IL1.
SEQUENCE FROM N.A. (LONG ISOFORM).
RX MEDLINE=96131982; PubMed=8578682;
RA Kato H., Ohashi T., Nakamura N., Nishimura Y., Watari T., Goitsuka R.,
RA Tsujimoto H., Hasegawa A.;
RT "Molecular cloning of equine interleukin-1 alpha and -beta cDNAs.";
RL Vet. Immunol. Immunopathol. 48:221-231(1995).
RN IL1.
SEQUENCE FROM N.A. (LONG ISOFORM).
RX MEDLINE=96285941; PubMed=9622738;
RA Howard R.D., McIlwraith C.W., Trotter G.W., Nyborg J.K.;
RT "Cloning of equine interleukin-1 alpha and equine interleukin-1 beta
RT and determination of their full-length cDNA sequences.";
RL Am. J. Vet. Res. 59:704-711(1998).
RN IL1.
SEQUENCE FROM N.A. (SHORT ISOFORM).
RX MEDLINE=97080493; PubMed=8921836;
RA Kato H., Yoon H.Y., Ohashi T., Watari T., Goitsuka R., Tsujimoto H.,
RA Hasegawa A.;
RT "Identification of an alternatively spliced transcript of equine
RT interleukin-1 beta.";
RL Gene 177:11-16(1996).
CC -1- FUNCTION: PRODUCED BY ACTIVATED MACROPHAGES, IL-1 STIMULATES
CC MATURATION & PROLIFERATION, & FIBROBLAST GROWTH FACTOR ACTIVITY.
CC IL-1 PROTEINS ARE INVOLVED IN THE INFLAMMATORY RESPONSE, BEING
CC IDENTIFIED AS ENDOGENOUS PYROGENS, AND ARE REPORTED TO STIMULATE
CC THE RELEASE OF PROSTAGLANDIN AND COLLAGENASE FROM SYNOVIAL CELLS
CC (BY SIMILARITY).
CC -1- SUBUNIT: MONOMER (BY SIMILARITY).
CC -1- ALTERNATIVE PRODUCTS: 2 isoforms; a long form (shown here) and a
CC short form; are produced by alternative splicing.
CC -1- DOMAIN: THE SIMILARITY AMONG THE IL-1 PRECURSORS SUGGESTS THAT THE
CC AMINO ENDS OF THESE PROTEINS SERVE SOME AS YET UNDEFINED FUNCTION.
CC -1- MISCELLANEOUS: THE LACK OF A SPECIFIC HYDROPHOBIC SEGMENT IN THE
CC PRECURSOR SEQUENCE SUGGESTS THAT IL-1 IS RELEASED BY DAMAGED CELLS
CC OR IS SECRETED BY A MECHANISM DIFFERING FROM THAT USED FOR OTHER
CC SECRETORY PROTEINS.
CC -1- SIMILARITY: BELONGS TO THE IL-1 FAMILY.
CC
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CC EMBL; D42147; BAA07718.1; -
DR EMBL; U92481; AAC39256.1; -
DR EMBL; D42165; BAA22528.1; -
DR HSSP; P10749; 811B.
DR InterPro; IPR002348; IL1_HBGF.
DR InterPro; IPR000975; Interleukin_1.
DR InterPro; IPR003502; Interleukin_1_prop.
DR Pfam; PF02394; IL1; 1.
DR Pfam; PF02394; IL1_prop; 1.
DR PRINTS; PR00262; IL1HBGF.
DR ProDom; PD002536; Interleukin_1; 1.
DR SMART; SM00125; IL1; 1.
DR PROSITE; PS00253; INTERLEUKIN_1; 1.
KW Cytokine; Macrophage; Mitogen; Inflammatory response; Pyrogen;
KW Alternative splicing.
FT PROPEP 1 115 BY SIMILARITY.
FT CHAIN 116 268 INTERLEUKIN-1 BETA.
FT VARSPPLIC 101 154 MISSING (IN SHORT ISOFORM).
FT CONFLICT 45 45 D -> N (IN REF. 2).
FT CONFLICT 55 55 H -> Q (IN REF. 2).
FT CONFLICT 64 65 AM -> VV (IN REF. 2).
FT CONFLICT 71 71 V -> M (IN REF. 2).
FT CONFLICT 110 111 EG -> DD (IN REF. 2).
FT CONFLICT 118 118 M -> V (IN REF. 2).
FT CONFLICT 245 245 S -> K (IN REF. 2).
SQ SEQUENCE 268 AA; 30268 MW; 336F27792A1542EA CRC64;

Query Match 16.7%; Score 137; DB 1; Length 268;
Best Local Similarity 30.3%; Pred. No. 1.le-06;
Matches 47; Conservative 22; Mismatches 60; Indels 26; Gaps 6;

QY 2 MVLSGALCFMRKDSALKVLYLHNNQLLAGLHAEKVIKGEISVVPNRDASLSPVILG 61
DB 133 LVLGSA-----CELAQVHLNGENTNOQVFCMSFVQGE-----ETDKIPVALG 176
QY 62 VGGGSCQLSCGTGK-PILKLEPVMIMELYLGAKESKFTFYRRDMGLTSSFESAAYPGW 120
DB 177 LKAKNLYLSCGMKDGKPTLQLETVD-PNTYPRKMEKRFVKNKMEIKGNVFESAMYPNW 235
QY 121 FLCTSPEADQPVRL--TOIPEDPAWDAPITDFYFQ 153
DB 236 YISTQAQKSVPLGNTRGRD-----ITDFIME 264

RESULT 10
IL1B_CEREL
ID IL1B_CEREL STANDARD; PRT; 266 AA.
AC P51745;
DT 01-OCT-1996 (Rel. 34, Created)
DT 01-OCT-1996 (Rel. 34, Last sequence update)
DT 01-MAR-2002 (Rel. 41, Last annotation update)
DE Interleukin-1 beta precursor (IL-1 beta).
RN IL1B.
OS Cervus elaphus (Red deer).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervoidae;
OC Cervidae; Cervinae; Cervus.
OX NCBI_TaxID=9860;
RN IL1.
SEQUENCE FROM N.A.
RA Lockhart E.A.;
RL Submitted (MAR-1995) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: PRODUCED BY ACTIVATED MACROPHAGES, IL-1 STIMULATES
CC THYMOCYTE PROLIFERATION BY INDUCING IL-2 RELEASE, B-CELL
CC MATURATION AND PROLIFERATION, AND FIBROBLAST GROWTH FACTOR
CC ACTIVITY. IL-1S ARE INVOLVED IN THE INFLAMMATORY RESPONSE, BEING
CC IDENTIFIED AS ENDOGENOUS PYROGENS, AND ARE REPORTED TO STIMULATE
CC THE RELEASE OF PROSTAGLANDIN AND COLLAGENASE FROM SYNOVIAL CELLS
CC (BY SIMILARITY).
CC -1- SUBUNIT: MONOMER (BY SIMILARITY).
CC -1- DOMAIN: THE SIMILARITY AMONG THE IL-1 PRECURSORS SUGGESTS THAT THE
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DE Interleukin-1 beta precursor (IL-1 beta).
GN IL1B.
OS Cavia porcellus (Guinea pig).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Hystricognathi; Caviidae; Cavia.
OC NCBI_TaxID=10141;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=2; TISSUE=Spleen;
RC MEDLINE=99323828; PubMed=10394101;
RA Yoshimura T., Takeya M., Ogata H., Yamashiro S., Modi W.S.,
RA Gallitzner R.;
RT "Molecular cloning of the guinea pig GRO gene and its rapid expression
RT in the tissues of lipopolysaccharide-injected guinea pigs.";
RL Int. Arch. Allergy Immunol. 119:101-111(1999).
CC -1- FUNCTION: PRODUCED BY ACTIVATED MACROPHAGES, IL-1 STIMULATES
CC THYMOCYTE PROLIFERATION BY INDUCING IL-2 RELEASE, B-CELL
CC MATURATION AND PROLIFERATION, AND FIBROBLAST GROWTH FACTOR
CC ACTIVITY. IL-1S ARE INVOLVED IN THE INFLAMMATORY RESPONSE, BEING
CC IDENTIFIED AS ENDOGENOUS PYROGENS, AND ARE REPORTED TO STIMULATE
CC THE RELEASE OF PROSTAGLANDIN AND COLLAGENASE FROM SYNOVIAL CELLS
CC (BY SIMILARITY).
CC -1- SUBUNIT: MONOMER (By similarity).
CC -1- DOMAIN: THE SIMILARITY AMONG THE IL-1 PRECURSORS SUGGESTS THAT THE
CC AMINO ENDS OF THESE PROTEINS SERVE SOME AS YET UNDEFINED FUNCTION.
CC -1- MISCELLANEOUS: THE LACK OF A SPECIFIC HYDROPHOBIC SEGMENT IN THE
CC PRECURSOR SEQUENCE SUGGESTS THAT IL-1 IS RELEASED BY DAMAGED CELLS
CC OR IS SECRETED BY A MECHANISM DIFFERING FROM THAT USED FOR OTHER
CC SECRETORY PROTEINS (By similarity).
CC -1- SIMILARITY: BELONGS TO THE IL-1 FAMILY.
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CC EMBL; AF119622; AAD38502.1; .
CC HSSP; P10749; 8ILB.
CC InterPro: IPR002348; IL1_HBGF.
CC InterPro: IPR000975; Interleukin_1.
CC InterPro: IPR003502; Interleukin_1_prop.
CC Pfam; PF00340; IL1; 1.
CC PRINTS; PR00262; IL1HBGF.
CC PRODOM; PD002536; Interleukin_1.
CC SMART; SM00125; IL1; 1.
CC PROSITE; PS00233; INTERLEUKIN_1; 1.
CC Cytokine; Macrophage; Mitogen; Inflammatory response; Pyrogen.
CC PROPEP 1 114 BY SIMILARITY.
CC CHAIN 115 266 INTERLEUKIN-1 BETA.
CC SEQUENCE 266 AA; 30530 MW; 46558BA16BAC529A CRC64;

Query Match 16.1%; Score 131.5; DB 1; Length 266;
Best Local Similarity 31.9%; Pred. No. 3.9e-06;
Matches 38; Conservative 21; Mismatches 49; Indels 11; Gaps 3;

QY 17 LKVLYLHNNOLLAGGLHAEKVIKGEETSVVPNRALDASLSPVLTVGGSGQCLSCGTEKG 76
Db 140 LKALHLNGDNLNRQVVFMSFVGGR-----SDNKMFPVALGLGKNLYLUSCVNKG 190
QY 77 -PILKLEPVMIMELYLGAKESKSFTFYRRDMGLTSSFESAAYPGWFLCTSP EADQPVR 134
Db 191 KPVQLQESVDGKG-YPKKKMEKRFVNKITSKSTVFESFAQFPNWYISTSQAEHKPVFL 248

RESULT 13
IL1B_PIG
ID IL1B_PIG STANDARD; PRT; 267 AA.
AC P26889;

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01-AUG-1992 (Rel. 23, Created)
01-AUG-1992 (Rel. 23, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
Interleukin-1 beta precursor (IL-1 beta).
IL1B.
Sus scrofa (pig).
Eukaryote; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
NCBI_TaxID=9823;
[1]
SEQUENCE FROM N.A.
MEDLINE=93314975; PubMed=8325511;
Huether M.J., Lin G., Smith D.M., Murtaugh M.P., Molitor T.W.;
Cloning, sequencing and regulation of an mRNA encoding porcine
interleukin-1 beta.";
RT interluekin-1 beta.";
Gene 129:285-289(1993).
CC -|- FUNCTION: PRODUCED BY ACTIVATED MACROPHAGES, IL-1 STIMULATES
CC THYMOCYTE PROLIFERATION BY INDUCING IL-2 RELEASE. B-CELL
CC MATURATION & PROLIFERATION, & FIBROBLAST GROWTH FACTOR ACTIVITY.
CC IL-1 PROTEINS ARE INVOLVED IN THE INFLAMMATORY RESPONSE, BEING
CC IDENTIFIED AS ENDOGENOUS PYROGENS, AND ARE REPORTED TO STIMULATE
CC THE RELEASE OF PROSTAGLANDIN AND COLLAGENASE FROM SYNOVIAL CELLS.
CC -|- SUBUNIT: MONOMER.
CC -|- DOMAIN: THE SIMILARITY AMONG THE IL-1 PRECURSORS SUGGESTS THAT THE
CC AMINO ENDS OF THESE PROTEINS SERVE SOME AS YET UNDEFINED FUNCTION.
CC -|- MISCELLANEOUS: THE LACK OF A SPECIFIC HYDROPHOBIC SEGMENT IN THE
CC PRECURSOR SEQUENCE SUGGESTS THAT IL-1 IS RELEASED BY DAMAGED CELLS
CC OR IS SECRETED BY A MECHANISM DIFFERING FROM THAT USED FOR OTHER
CC SECRETORY PROTEINS.
CC -|- SIMILARITY: BELONGS TO THE IL-1 FAMILY.
-----
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DR EMBL; M66725; AAA02584.1; -.
DR PIR; JN0724; JN0724.
DR HSSP; P01584; LH1B.
DR InterPro; IPR002348; IL1_HBGF.
DR InterPro; IPR000975; Interleukin_1.
DR InterPro; IPR003502; Interleukin_1_prop.
DR Pfam; PF00340; IL1; 1.
DR PRINTS; PF02394; IL1_propep; 1.
DR PRODOM; PD00262; IL1HBGF.
DR SMART; SM00125; IL1; 1.
DR PROSITE; PS00253; INTERLEUKIN_1; 1.
KW Cytokine; Macrophage; Mitogen; Inflammatory response; Pyrogen.
FT PROPEP 1 114 BY SIMILARITY.
FT CHAIN 115 267 INTERLEUKIN-1 BETA.
SQ SEQUENCE 267 AA; 30404 MW; 7F6B92B784D5086F CRC64;
Query Match 15.8%; Score 129; DB 1; Length 267;
Best Local Similarity 29.9%; Pred. No. 7e-06;
Matches 47; Conservative 26; Mismatches 48; Indels 36; Gaps 8;
QY 2 MVLSGALCFMRKDSALKVLVLYHNOLLACGLHAEKV----TKGEISVVPNRALDASLS 56
Db :|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||
132 LVLAG-----PHMLKAHL-----LLTGDLKREVVFCMSFVGQDSN-----NKI 170
QY 57 PVILGVGGSCQLSC-GTEKGPILKLKPNIIMELYLGAKESKSFTFYRRDMGLTSFSFESA 115
Db |||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||
171 PVTLGIGKNLVLCVMKNTPTLOLEDID-PKYPKRDMEKRFVYKTEIKNRVEFESA 229
QY 116 APFGWFLCTSPDAQPVRL--TOIPEDPAWDAPITDF 150
Db |||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||
230 LPYNWYISTSAEQRPVFVLGNKGQRQ-----ITDF 260

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RESULT 14
IL1B_MOUSE
ID IL1B_MOUSE STANDARD; PRT; 269 AA.
AC P10749;
DT 01-JUL-1989 (Rel. 11, Created)
DT 01-JUL-1989 (Rel. 11, Last sequence update)
DT 30-MAY-2000 (Rel. 39, Last annotation update)
DE Interleukin-1 beta precursor (IL-1 beta).
GN IL1B.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RA MEDLINE=87058957; PubMed=3491144;
RA Gray P.W., Glaister D., Chen E., Goeddel D.V., Pennica D.;
RT "Two interleukin 1 genes in the mouse: cloning and expression of the
RT cDNA for murine interleukin 1 beta.";
RL J. Immunol. 137:3644-3648(1986).
RN [2]
RP SEQUENCE FROM N.A.
RA MEDLINE=87117546; PubMed=3492706;
RA Telford J.L., Macchia G., Massone A., Carinci V., Palla E., Melli M.;
RT "The murine interleukin 1 beta gene: structure and evolution.";
RN [3]
RP Nucleic Acids Res. 14:9955-9963(1986).
RN [4]
RP SEQUENCE OF 118-139.
RX MEDLINE=88229074; PubMed=2967326;
RX Huang J.J., Newton R.C., Rutledge S.J., Horuk R., Matthew J.B.,
RA Covington M., Lin Y.;
RT "Characterization of murine IL-1 beta. Isolation, expression, and
RT purification.";
RL J. Immunol. 140:3838-3843(1988).
RN [5]
RP X-RAY CRYSTALLOGRAPHY (2.0 ANGSTROMS).
RX MEDLINE=92222792; PubMed=1807351;
RX van Oostrum J., Priestle J.P., Grutter M.G., Schmitz A.;
RT "The structure of murine interleukin-1 beta at 2.8-A resolution.";
RN [6]
RP J. Struct. Biol. 107:189-195(1991).
CC -!- FUNCTION: PRODUCED BY ACTIVATED MACROPHAGES, IL-1 STIMULATES
CC THYMOCYTE PROLIFERATION BY INDUCING IL-2 RELEASE, B-CELL
CC MATURATION & PROLIFERATION, & FIBROBLAST GROWTH FACTOR ACTIVITY.
CC IL-1 PROTEINS ARE INVOLVED IN THE INFLAMMATORY RESPONSE, BEING
CC IDENTIFIED AS ENDOGENOUS PYROGENS, AND ARE REPORTED TO STIMULATE
CC THE RELEASE OF PROSTAGLANDIN AND COLLAGENASE FROM SYNOVIAL CELLS.
CC -!- SUBUNIT: MONOMER.
CC -!- DOMAIN: THE SIMILARITY AMONG THE IL-1 PRECURSORS SUGGESTS THAT THE
CC AMINO ENDS OF THESE PROTEINS SERVE SOME AS YET UNDEFINED FUNCTION.
CC -!- MISCELLANEOUS: THE LACK OF A SPECIFIC HYDROPHOBIC SEGMENT IN THE
CC PRECURSOR SEQUENCE SUGGESTS THAT IL-1 IS RELEASED BY DAMAGED CELLS
CC OR IS SECRETED BY A MECHANISM DIFFERING FROM THAT USED FOR OTHER
CC SECRETORY PROTEINS.
CC -!- SIMILARITY: BELONGS TO THE IL-1 FAMILY.
CC -----
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CC -----
CC EMBL: M15131; AAA39276.1; -
CC EMBL: X04964; CA28637.1; -
CC PIR: A24719; A24719.
CC PIR: S13029; S13029.
CC PDB: 811B; 15-OCT-94.
CC PDB: 2MB; 31-JAN-94.
CC MGD: MGI:96543; Il1b.
CC InterPro; IPR002348; IL1_HBGF.
CC InterPro; IPR000975; Interleukin_1.

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DR InterPro; IPR003502; Interleukin_1_prop.
DR Pfam; PF00340; IL1; 1.
DR Pfam; PF02394; IL1_propep; 1.
DR PRINTS; PR00262; IL1HBGF.
DR PRODOM; PD002536; Interleukin_1; 1.
DR SMART; SM00125; IL1; 1.
DR PROSITE; PS00253; INTERLEUKIN_1; 1.
KW Cytokine; Macrophage; Mitogen; Inflammatory response; Pyrogen;
KW 3D-structure.
FT PROPEP 1 117
FT CHAIN 118 269 INTERLEUKIN-1 BETA.
FT STRAND 123 129
FT TURN 130 131
FT STRAND 134 137
FT TURN 140 141
FT STRAND 143 146
FT TURN 150 154
FT STRAND 159 163
FT TURN 170 171
FT STRAND 173 179
FT TURN 180 181
FT STRAND 184 191
FT TURN 192 193
FT STRAND 194 201
FT TURN 204 206
FT HELIX 214 216
FT STRAND 217 222
FT TURN 227 231
FT STRAND 235 236
FT STRAND 238 242
FT STRAND 247 248
FT STRAND 250 252
FT STRAND 258 259
FT STRAND 262 266
SQ SEQUENCE 269 AA; 30931 MW; 734FA17B02ED87EE CRC64;

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Query Match 15.6%; Score 128; DB 1; Length 269;
Best Local Similarity 31.7%; Pred. No. 9e-06;
Matches 44; Conservative 23; Mismatches 50; Indels 22; Gaps 6;

QY 8 LCFRMKDSALKVLYLHNNQLLAGLHAELKVIKGEIISVVPNRALDASLS----- 56
DB 123 LHVLRDEQOKSLVSDPYELK-ALH-----LNGQNI-----NQVIESMSFVQGEPSNDKI 173
QY 57 PVILGVGGSQCLSCGTEKG-PILKLEPVNIMELYLGAKESKSTFYRDMGLTSSFESA 115
DB 174 PVALGLKGNLYLSCVMKDGTPTLQLESVDPKQ-YPKKKMEKRFVFNKIEVKSVEFESA 232
QY 116 AYPGWFLCTSPDADQPVRL 134
DB 233 EFPNWYISTSOAEKHPVFL 251

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RESULT 15
IL1B_TRIVU
ID IL1B_TRIVU STANDARD; PRT; 269 AA.
AC Q9XS77;
DT 01-MAR-2002 (Rel. 41, Created)
DT 01-MAR-2002 (Rel. 41, Last sequence update)
DT 01-MAR-2002 (Rel. 41, Last annotation update)
DE Interleukin-1 beta precursor (IL-1 beta).
GN IL1B.
OS Trichosurus vulpecula (Brush-tailed possum).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Metatheria; Diprotodontia; Phalangeridae; Trichosurus.
OX NCBI_TaxID=9337;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=99221044; PubMed=10206203;
RA Wedlock D.N., Goh L.P., Parlane N.A., Buddle B.M.;
RT "Molecular cloning and physiological effects of brushtail possum
RT interleukin-1beta.";

```


GenCore version 4.5
Copyright (c) 1993 - 2000 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 22, 2002, 14:09:08 ; Search time 27.07 Seconds
(without alignments)
996.942 Million cell updates/sec

Title: US-09-770-528-2
Perfect score: 819
Sequence: 1 MVLGALCFRKMDSALKVL.....IPEDPAWDAPITDFVQOCD 156

Scoring table:
BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 562222 seqs, 172994929 residues

Total number of hits satisfying chosen parameters: 562222

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

- 1: SP_archaea.*
- 2: SP_bacteria.*
- 3: SP_fungi.*
- 4: SP_human.*
- 5: SP_invertebrate.*
- 6: SP_mammal.*
- 7: SP_mhc.*
- 8: SP_organelle.*
- 9: SP_phase.*
- 10: SP_plant.*
- 11: SP_rodent.*
- 12: SP_virus.*
- 13: SP_vertebrate.*
- 14: SP_unclassified.*
- 15: SP_rvirus.*
- 16: SP_bacteriap.*
- 17: SP_archaeap.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	819	100.0	156	11	Q9JIIG2 mus musculus
2	814	99.4	155	11	Q9QYI1 mus musculus
3	734	89.6	155	4	Q9UBH0 mus musculus
4	309	37.7	152	4	Q969H5 mus musculus
5	307.5	37.5	159	4	Q96GD6 mus musculus
6	305.5	37.3	177	6	Q9GMZ4 mus musculus
7	285.5	34.9	176	6	Q9BEH0 mus musculus
8	280.5	34.2	144	4	Q9BXX1 mus musculus
9	275.5	33.6	176	6	Q9GKX2 mus musculus
10	198.5	24.2	157	4	Q9UHA5 mus musculus
11	190.5	23.3	72	6	Q77771 mus musculus
12	189.5	23.1	192	4	Q9UHA6 mus musculus
13	189.5	23.1	218	4	Q9NZH6 mus musculus
14	189.5	23.1	218	4	Q9HBF3 mus musculus
15	181.5	22.2	160	11	Q9JLA2 mus musculus
16	176.5	21.6	178	4	Q9HBF2 mus musculus

17	169.5	20.7	267	13	Q73909
18	167.5	20.5	158	4	Q9UHA7
19	165.5	20.2	183	11	Q9DEZ6
20	157	19.2	169	4	Q9NZH8
21	143	17.5	283	13	Q9PVZ5
22	128	15.6	599	11	Q9IWP7
23	127	15.5	267	6	Q29082
24	126	15.4	260	13	Q9YGD3
25	125	15.3	267	11	Q9IZL5
26	124	15.1	272	13	Q9DDF3
27	123	15.0	272	13	Q9DDF2
28	122.5	15.0	266	6	Q9RTK1
29	122	14.9	153	4	O43645
30	122	14.9	254	13	Q9PT12
31	122	14.9	269	4	Q96HE5
32	119	14.5	261	13	Q9UW84
33	117	14.3	276	13	O57398
34	117	14.3	276	13	Q9FW18
35	108.5	13.2	118	6	Q9TJS0
36	88.5	10.8	64	13	Q98SG5
37	84	10.3	259	16	Q92XE8
38	84	10.3	1427	13	Q91562
39	84	10.3	1445	11	Q63155
40	83.5	10.2	1005	5	Q95ZC5
41	82	10.0	579	5	Q9NFR9
42	80.5	9.8	666	2	Q93R48
43	80.5	9.8	4881	2	Q9SOR3
44	80	9.8	364	10	O49364
45	79	9.6	670	11	Q9QYE2

ALIGNMENTS

RESULT 1

Q9JIIG2	PRELIMINARY;	PRT;	156 AA.
ID	Q9JIIG2		
AC	Q9JIIG2		
DT	01-OCT-2000 (TrEMBLrel. 15, Created)		
DT	01-OCT-2000 (TrEMBLrel. 15, Last sequence update)		
DT	01-DEC-2001 (TrEMBLrel. 19, Last annotation update)		
DE	INTERLEUKIN-1 DELTA (INTERLEUKIN 1 RECEPTOR ANTAGONIST HOMOLOG 1).		
DE	1).		
GN	IL1F5 OR IL1H1.		
OS	Mus musculus (Mouse).		
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;		
OC	Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.		
OX	NCBI_TaxID=10090;		
RN	[1]		
RP	SEQUENCE FROM N.A.		
RA	Debets R., Timans J.C., Zurawski S., Sana T.R., Bazan F.,		
RA	Kastelein R.A.;		
RT	"Novel IL-1 ligands IL-1d and IL-1e use IL-1R related protein 2.";		
RL	Submitted (FEB-2000) to the EMBL/GenBank/DBJ databases.		
RN	[2]		
RP	SEQUENCE FROM N.A.		
RC	STRAIN=C57BL/6J; TISSUE=TONGUE, AND STOMACH;		
RX	MEDLINE=21085660; PubMed=11217851;		
RA	Kawai J., Shinagawa A., Shibata K., Yoshino M., Ishii Y.,		
RA	Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,		
RA	Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamataka I.,		
RA	Saito T., Okazaki Y., Gojohori T., Bono H., Kasukawa T., Saito R.,		
RA	Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,		
RA	Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,		
RA	Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,		
RA	Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,		
RA	Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,		
RA	Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,		
RA	Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,		
RA	Gustincich S., Hill D., Hofmann C., Hume D.A., Kamiya M., Lee N.H.,		
RA	Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,		
RA	Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,		
RA	Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.F.,		

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RA Suzuki H., Toyooka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
RA Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohsaki S.,
RA Hayashizaki Y.,
RT "Functional annotation of a full-length mouse cDNA collection.";
RL Nature 409:685-690(2001).
DR EMBL: AF230378; AF91275.1; -
DR EMBL: AK009741; BAB26471.1; -
DR EMBL: AK008977; BAB26002.1; -
DR HSSP: P18510; 1ILR.
DR MGD: MGI:1859325; 1Ilf5.
DR InterPro: IPR000975; Interleukin_1.
DR Pfam: PF00340; IL1; 1.
DR ProDom: PD002536; Interleukin_1; 1.
DR SMART: SM00125; IL1; 1.
DR PROSITE: PS00253; INTERLEUKIN_1; 1.
SQ SEQUENCE 156 AA; 17136 MW; A4D1EE2F93CF77A7 CRC64;

Query Match 100.0%; Score 819; DB 11; Length 156;
Best Local Similarity 100.0%; Pred. No. 5.2e-80;
Matches 156; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MMVLSGALCFRKMDSALKVLYLHNNQLLAGLHAKEIKGEEISVVPNRALDASLSPVIL 60
DB 1 MMVLSGALCFRKMDSALKVLYLHNNQLLAGLHAKEIKGEEISVVPNRALDASLSPVIL 60
QY 61 GVGGSQCLSCGTEKGPILKLEPNIMELYLGAKESKSFYRRDMGLTSSFESAAYPGW 120
DB 61 GVGGSQCLSCGTEKGPILKLEPNIMELYLGAKESKSFYRRDMGLTSSFESAAYPGW 120
QY 121 FLCTSPDQPVRLTQIPEDPAWDAPITDFYFQOCD 156
DB 121 FLCTSPDQPVRLTQIPEDPAWDAPITDFYFQOCD 156

RESULT 2
Q9QYV1 PRELIMINARY; PRT; 155 AA.
ID Q9QYV1
AC Q9QYV1
DT 01-MAY-2000 (TremBLrel. 13, Created)
DT 01-MAY-2000 (TremBLrel. 13, Last sequence update)
DT 01-DEC-2001 (TremBLrel. 19, Last annotation update)
DE IL-1L1 PROTEIN (INTERLEUKIN-1 HOMOLOG 3).
GN IL1F5 OR IL1H1.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RA Barton J.L., Nicklin M.J.H.;
RT "IL-1L1: A Novel Member of the Interleukin-1 Gene Family is Expressed
in Trophoblasts and Macrophages.";
RL Submitted (OCT-1999) to the EMBL/GenBank/DBJ databases.
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=20203405; PubMed=1074718;
RA Kumar S., McDonnell P.C., Lehr R., Tierney L., Tzimas M.N.,
RA Griswold D.E., Capper E.A., Tal-Singer R., Wells G.I., Doyle M.L.,
RA Young P.R.;
RT "Identification and initial characterization of four novel members of
the interleukin-1 family.";
RL J. Biol. Chem. 275:10308-10314(2000).
DR EMBL: AJ250429; CAB59831.1; -
DR EMBL: AF200495; AAF69251.1; -
DR HSSP: P18510; 1ILR.
DR MGD: MGI:1859325; 1Ilf5.
DR InterPro: IPR000975; Interleukin_1.
DR Pfam: PF00340; IL1; 1.
DR ProDom: PD002536; Interleukin_1; 1.
DR SMART: SM00125; IL1; 1.
DR PROSITE: PS00253; INTERLEUKIN_1; 1.
SQ SEQUENCE 155 AA; 17004 MW; A4B1770F2E12533A CRC64;
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Query Match 99.4%; Score 814; DB 11; Length 155;
Best Local Similarity 100.0%; Pred. No. 1.8e-79;
Matches 155; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 MVLSGALCFRKMDSALKVLYLHNNQLLAGLHAKEIKGEEISVVPNRALDASLSPVILG 61
DB 1 MVLSGALCFRKMDSALKVLYLHNNQLLAGLHAKEIKGEEISVVPNRALDASLSPVILG 60
QY 62 VQGGSOCLSCGTEKGPILKLEPNIMELYLGAKESKSFYRRDMGLTSSFESAAYPGWF 121
DB 61 VQGGSOCLSCGTEKGPILKLEPNIMELYLGAKESKSFYRRDMGLTSSFESAAYPGWF 120
QY 122 LCSTSPDQPVRLTQIPEDPAWDAPITDFYFQOCD 156
DB 121 LCSTSPDQPVRLTQIPEDPAWDAPITDFYFQOCD 155

RESULT 3
Q9UBH0 PRELIMINARY; PRT; 155 AA.
ID Q9UBH0
AC Q9UBH0
DT 01-MAY-2000 (TremBLrel. 13, Created)
DT 01-MAY-2000 (TremBLrel. 13, Last sequence update)
DT 01-OCT-2001 (TremBLrel. 18, Last annotation update)
DE F1L1 DELTA (INTERLEUKIN-1 LIKE PROTEIN 1) (INTERLEUKIN-1 RECEPTOR
ANTAGONIST HOMOLOG 1) (INTERLEUKIN-1 DELTA).
GN IL1H1 OR IL1L1.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=20092888; PubMed=10625660;
RA Smith D.E., Reushaw B.R., Ketchum R.R., Kubin M., Garka K.E.,
RA Sims J.E.;
RT "Four New Members Expand the IL-1 Superfamily.";
RL J. Biol. Chem. 275:1169-1175(2000).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=99443727; PubMed=10512743;
RA Mulero J.J., Pace A.M., Nelken S.T., Loeb D.B., Correa T.R.,
RA Drmanac R., Ford J.E.;
RT "IL1H1: A Novel Interleukin-1 Receptor Antagonist Gene.";
RL Biochem. Biophys. Res. Commun. 263:702-706(1999).
RN [3]
RP SEQUENCE FROM N.A.
RC TISSUE=PLACENTA;
RA Barton J.L., di Giovine F.S., Symons J.A., Nicklin M.J.H.;
RT "A tissue specific interleukin-1 receptor antagonist homolog from the
IL-1 cluster lacks IL-1, IL-1ra, IL-18 and IL-18ra activities.";
RL Submitted (JUN-1999) to the EMBL/GenBank/DBJ databases.
RN [4]
RP SEQUENCE FROM N.A.
RA Barton J.L., Herbst R., Bosio D., Nicklin M.J.H.;
RT "A tissue specific interleukin-1 receptor antagonist homolog from the
IL-1 cluster lacks IL-1, IL-1ra, IL-18 and IL-18ra activities.";
RL Submitted (JAN-2000) to the EMBL/GenBank/DBJ databases.
RN [5]
RP SEQUENCE FROM N.A.
RX MEDLINE=20322477; PubMed=10866108;
RA Mulero J.J., Nelken S.T., Ford J.E.;
RT "Organization of the Human Interleukin-1 Receptor Antagonist Gene
IL1H1.";
RL Immunogenetics 51:425-428(2000).
RN [6]
RP SEQUENCE FROM N.A.
RA Debets R., Timans J.C., Zurawski S., Sana T.R., Bazan F.,
RA Kastelein R.A.;
RT "Novel IL-1 ligands IL-1d and IL-1e use IL-1R related protein 2.";
RL Submitted (FEB-2000) to the EMBL/GenBank/DBJ databases.
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Db      120 WFLCGPAEPQPPVOLTKEPSA-----RTKFYFEQ 150
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RESULT 5
Q96GD6 PRELIMINARY; PRT; 159 AA.
ID AC Q96GD6;
AC Q96GD6;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE INTERLEUKIN 1 RECEPTOR ANTAGONIST.
DE DE
OS Homo sapiens (Human).
OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OC NCBI_Taxid=9606;
OC [1]
RN SEQUENCE FROM N.A.
RP TISSUE=PANGREATIC ADENOCARCINOMA;
RC Strausberg R.;
RL Submitted (JUL-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; BC009745; RAH09745.1; -.
KW Receptor.
KW
SQ SEQUENCE 159 AA; 17888 MW; C1D66CDF0D2F7B44 CRC64;

Query Match 37.5%; Score 307.5; DB 4; Length 159;
Best Local Similarity 48.0%; Pred No. 4.1e-25;
Matches 72; Conservative 16; Mismatches 45; Indels 17; Gaps

QY 10 FRMKDSALKVLYLHNNQLLAGLHAEKVIKGEISVVPNRLDASLSP--VILGVQGGSQ 67
Db 11: | | | | | | | | | | | | | | | | | | | | | | | | | | | |
20 FRIWDVNQKTFYLRNNQLVAGYVLOGGNVLEEKIDVP-----IEPHALFLGIHGKM 72
QY 68 CLSC---GTEKGPILKEPVNIMELYLGAKESKSTFYFRDMGLTSSPESAAYPGWFLCT 124
Db 1111 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
73 CLSCVKSGDETR--IQLEAVNTIDISENKKQKRFATIRSDSGPTSFESACAPGWFLCT 130
QY 125 SPEADQPVRLTIQIPEDPAMDAPITDFYFQQ 154
Db 131 AMEAQDPVSLTNKPD-----GVWTKFYFQE 157

RESULT 6
Q9GMZ4 PRELIMINARY; PRT; 177 AA.
ID AC Q9GMZ4;
AC Q9GMZ4;
DT 01-NAR-2001 (TrEMBLrel. 16, Created)
DT 01-NAR-2001 (TrEMBLrel. 16, Last sequence update)
DT 01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE INTERLEUKIN-1 RECEPTOR ANTAGONIST.
DE DE
OS Tursiops truncatus (Atlantic bottle-nosed dolphin).
OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Cetacea; Odontoceti; Delphinidae;
OC Tursiops.
OC NCBI_Taxid=9739;
OC [1]
RN SEQUENCE FROM N.A.
RP MEDLINE=21109087; PubMed=11182153;
RX Inoue Y., Itou T., Jimbo T., Syoutji Y., Ueda K., Sakai T.;
RT "Molecular cloning and functional expression of bottle-nosed dolphin
RT (Tursiops truncatus) interleukin-1 receptor antagonist.";
RRL Vet. Immunol. Immunopathol. 78:131-141(2001).
RRL EMBL; AB038268; BAB11806.1; -.
RRL HSSP; P18510; 1IRA.
DR InterPro; IPR000975; Interleukin_1.
DR Pfam; PF00340; IL1; 1.
DR ProDom; PD002536; Interleukin_1; 1.
DR SMART; SM00125; IL1; 1.
DR PROSITE; PS00253; INTERLEUKIN_1; 1.
KW Receptor.
KW
SQ SEQUENCE 177 AA; 19923 MW; 6FD19A06C09B131B CRC64;

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ID Q9NZH6 PRELIMINARY; PRT; 218 AA.
AC Q9NZH6;
DT 01-OCT-2000 (TREMBLrel. 15, Created)
DT 01-OCT-2000 (TREMBLrel. 15, Last sequence update)
DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)
DE INTERLEUKIN-1 HOMOLOG 4 (IL-1X PROTEIN) (INTERLEUKIN-1-RELATED PROTEIN
DE LONG ISOFORM A).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
[1]
RN RP
RP SEQUENCE FROM N.A.
RC TISSUE-FETAL LUNG, FETAL TESTIS, FETAL B-CELL, AND FETAL COLON;
RC MEDLINE=20209405; PubMed=10744718;
RA Kumar S., McDonnell P.C., Lehr R., Tierney L., Tzimas M.N.,
RA Griswold D.E., Capper E.A., Tal-Singer R., Wells G.I., Doyle M.L.,
RA Young P.R.;
RT "Identification and initial characterization of four novel members of
RT the interleukin-1 family."
RL J. Biol. Chem. 275:10308-10314(2000).
[2]
RN RP
RP SEQUENCE FROM N.A.
RC TISSUE-COLON CARCINOMA;
RA Manoj P.P., Mantovani A., Muzio M.;
RL Submitted (JUL-1999) to the EMBL/GenBank/DBJ databases.
[3]
RN RP
RP SEQUENCE FROM N.A.
RA Pan G., Risser P., Mao W., Baldwin D.T., Zhong A.W., Yansura D.,
RA Lewis L., Eigenbrot C., Henzel W.J., Vandlen R., Filvaroff E.;
RT "IL-1H, an interleukin-1-related protein that binds IL-18 receptor/IL-
RT 1Rrp."
RL Submitted (APR-2000) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF200496; AAF69252.1; -.
DR EMBL; AF167368; AAG29344.1; -.
DR EMBL; AF251118; AAG14420.1; -.
DR HSP; P18510; ILIR.
DR InterPro; IPR000975; Interleukin_1.
DR Pfam; PF00340; IL1; 1.
DR ProDom; PD002536; Interleukin_1; 1.
DR SMART; SM00125; IL1; 1.
SQ SEQUENCE 218 AA; 24126 MW; 96E089310D2CEA68 CRC64;

Query Match 23.1%; Score 189.5; DB 4; Length 218;
Best Local Similarity 37.3%; Pred. No. 2.8e-12;
Matches 50; Conservative 23; Mismatches 50; Indels 11; Gaps 5;

QY 10 FRMKDSALKVLYLHNNQLAGLHAEKVIKGEISVVPNRLDASL---SPVILGVQGS 66
DB 60 FSIHQDHKVLVLDGSLNLA--VPDKNYIRPEIFFALASSLSASAEGKSPILLGVSKGE 117
QY 67 QCLSCGTEKG---PILKLEPVNIMELYLGAKES--KSFTFYRRDMGLTSSFESAAYPGWF 121
DB 118 FCLYCDKDKGSHPSLQKKEKLMKL-AAQKESARRPFIFYRAQVGSWNMLSAHPGWF 176
QY 122 LCTSPDADQPVRLT 135
DB 177 ICTSCNCPVGVGT 190

RESULT 15
Q9HBF3 PRELIMINARY; PRT; 160 AA.
ID Q9HBF3
AC Q9HBF3;
DT 01-OCT-2000 (TREMBLrel. 15, Created)
DT 01-OCT-2000 (TREMBLrel. 15, Last sequence update)
DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)
DE INTERLEUKIN-1 HOMOLOG 1 (INTERLEUKIN-1 EPSILON) (INTERLEUKIN 1
DE SUPERFAMILY 1, EPSILON).
DE IL1F6 OR FIL1 OR IL1E.
GN Mus musculus (Mouse).
OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
[1]
RN RP
RP SEQUENCE FROM N.A.
RC MEDLINE=20209405; PubMed=10744718;
RA Kumar S., McDonnell P.C., Lehr R., Tierney L., Tzimas M.N.,
RA Griswold D.E., Capper E.A., Tal-Singer R., Wells G.I., Doyle M.L.,
RA Young P.R.;
RT "Identification and initial characterization of four novel members of
RT the interleukin-1 family."
RL J. Biol. Chem. 275:10308-10314(2000).
[2]
RN RP
RP SEQUENCE FROM N.A.
RA Debets R., Timans J., Zurawski S., Bazan J.F., Kastelein R.A.;
RT "Novel IL-1 family member IL-1e responds through the orphan IL-1R-
RT related protein 2; response is antagonized by IL-1d."
RL Submitted (NOV-1999) to the EMBL/GenBank/DBJ databases.
[3]
RN RP
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=EMBRYO;
RX MEDLINE=21085660; PubMed=11217851;
RA Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,
RA Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Fleischmann W., Gaasterland T., Gliss C., King B., Kochiwa H.,
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RN RP
RP SEQUENCE FROM N.A.
RC MEDLINE=21066552; PubMed=11145836;
RA Pan G., Risser P., Mao W., Baldwin D.T., Zhong A.W., Filvaroff E.,
RA Yansura D., Lewis L., Eigenbrot C., Henzel W.J., Vandlen R.;
RT "IL-1H, an interleukin 1-related protein that binds IL-18 receptor/IL-
RT 1Rrp."
RL Cytokine 13:1-7(2001).
DR EMBL; AF251119; AAG14421.1; -.
DR HSP; P18510; ILIR.
DR InterPro; IPR000975; Interleukin_1.
DR Pfam; PF00340; IL1; 1.
DR ProDom; PD002536; Interleukin_1; 1.
DR SMART; SM00125; IL1; 1.
SQ SEQUENCE 218 AA; 24138 MW; 76E09C35093DEA63 CRC64;

Query Match 23.1%; Score 189.5; DB 4; Length 218;
Best Local Similarity 37.3%; Pred. No. 2.8e-12;
Matches 50; Conservative 23; Mismatches 50; Indels 11; Gaps 5;

QY 10 FRMKDSALKVLYLHNNQLAGLHAEKVIKGEISVVPNRLDASL---SPVILGVQGS 66
DB 60 FSIHQDHKVLVLDGSLNLA--VPDKNYIRPEIFFALASSLSASAEGKSPILLGVSKGE 117
QY 67 QCLSCGTEKG---PILKLEPVNIMELYLGAKES--KSFTFYRRDMGLTSSFESAAYPGWF 121
DB 118 FCLYCDKDKGSHPSLQKKEKLMKL-AAQKESARRPFIFYRAQVGSWNMLSAHPGWF 176
QY 122 LCTSPDADQPVRLT 135
DB 177 ICTSCNCPVGVGT 190

RESULT 15
Q9HBF3 PRELIMINARY; PRT; 160 AA.
ID Q9HBF3
AC Q9HBF3;
DT 01-OCT-2000 (TREMBLrel. 15, Created)
DT 01-OCT-2000 (TREMBLrel. 15, Last sequence update)
DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)
DE INTERLEUKIN-1 HOMOLOG 1 (INTERLEUKIN-1 EPSILON) (INTERLEUKIN 1
DE SUPERFAMILY 1, EPSILON).
DE IL1F6 OR FIL1 OR IL1E.
GN Mus musculus (Mouse).
OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
[1]
RN RP
RP SEQUENCE FROM N.A.
RC MEDLINE=20209405; PubMed=10744718;
RA Kumar S., McDonnell P.C., Lehr R., Tierney L., Tzimas M.N.,
RA Griswold D.E., Capper E.A., Tal-Singer R., Wells G.I., Doyle M.L.,
RA Young P.R.;
RT "Identification and initial characterization of four novel members of
RT the interleukin-1 family."
RL J. Biol. Chem. 275:10308-10314(2000).
[2]
RN RP
RP SEQUENCE FROM N.A.
RA Debets R., Timans J., Zurawski S., Bazan J.F., Kastelein R.A.;
RT "Novel IL-1 family member IL-1e responds through the orphan IL-1R-
RT related protein 2; response is antagonized by IL-1d."
RL Submitted (NOV-1999) to the EMBL/GenBank/DBJ databases.
[3]
RN RP
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=EMBRYO;
RX MEDLINE=21085660; PubMed=11217851;
RA Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,
RA Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Fleischmann W., Gaasterland T., Gliss C., King B., Kochiwa H.,
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RA Kuehl P., Lewis S., Matsuo Y., Nikaldo I., Pesole G., Quackenbush J.,
RA Schram L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA Suzuki H., Toyooka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
RA Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
RA Hayashizaki Y.;
RT "Functional annotation of a full-length mouse cDNA collection.";
RL Nature 409:685-690(2001).
DR EMBL; AF200493; AAF69249.1; -.
DR EMBL; AF206697; AAG35671.1; -.
DR EMBL; AK004061; BAB23147.1; -.
DR HSSP; P01584; 1HIB.
DR MGD; MGI:1859324; Il1lf6.
DR InterPro; IPR000975; Interleukin_1.
DR Pfam; PF00340; IL1; 1.
DR ProDom; PD002536; Interleukin_1; 1.
DR SMART; SM00125; IL1; 1.
SQ SEQUENCE 160 AA; 18015 MW; AA0434D68FF62F4A CRC64;

Query Match      22.2%; Score 181.5; DB 11; Length 160;
Best Local Similarity 35.3%; Pred. No. 1.4e-11;
Matches 53; Conservative 25; Mismatches 49; Indels 23; Gaps 6;

QY 12 MKDSALKVLYLHNNQLLAGLHAEKVIKGE-----ISVVPNRALDASLS----PVILGV 62
DB 17 VODLSRRVWILQNNILTA-----VPRKEQTPVPTITLLPCQYLDLTETNRGDEPTMGV 69

QY 63 QGGSQCLSCGTEG--PILKLEPVNIMELYLGAKESKFTFYRRDMGLTSSFESRAYPGW 120
DB 70 QRPMSCLFC-TKDGEQPVQLGEGNIMENYKNKEPVKASLFYHKHKSGETTFESRAFPGW 128

QY 121 FLCTSPEADQPVRLTQIPEDPAWDAPITDF 150
DB 129 FIACSKGSCPLILTQ-----ELGEIFITDF 154
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Search completed: May 22, 2002, 14:12:31
Job time: 203 sec

